The following papers were read :--

1. Zoological Collections from Northern Rhodesia and adjacent Territories: *Lepidoptera Phalænæ*. By Sir GEORGE F. HAMPSON, Bart., F.Z.S.

[Received January 21, 1910.]

(Plates XXXVI.-XLI.*)

The collection of Moths made by Mr. S. A. Neave during his two journeys in Central Africa was, with the exception of a few species taken in Portuguese E. Africa on his journey homewards, entirely from the N. Western and N. Eastern districts of N. Rhodesia and the adjacent Katanga district of the Congo Free State. As the country is of moderate elevation without either high ranges of mountains or deep river valleys, the Moth fauna has a very uniform tropical African character with no mountain forms or forms of the faunas of the drier parts of either Southern or Northern Africa, and is mainly of a West African type together with a considerable number of forms found in East Africa and Mashonaland. The collection consists of 668 species, exclusive of a few *Pterophoride*, *Tortricide*, and *Tineide* which are not included, and of these 202 species are described as new; as follows:

Syntomidæ	21	species,	5 new.
Arctiadæ	21	,,	8 ,,
Agaristidæ	-29	>>	7 ,,
Noctuidæ	253	,,	86 "
Pterothysanidæ	5	,,	1 ',,
Lymantriadæ	34	22	9 ,,
Hypsidæ	12	,,	3 "
Sphingidæ	-19	22	2,,
Eupterotidæ	7	27	2,,
Notodontidæ	6	,,	2. ,,
Geometridæ	103	"	20 ,,
Saturniadæ	14	29	
Sabaliadæ	1	,,	
Uraniadæ	4	,,	
Arbelidæ	1	"	
Cossidæ	3	,,	1 ,,
Lasiocampidæ	-10	22	3 "
Chrysopolomidæ	3	"	2 ,,
Limacodidæ	11	. ,,	6 ,,
Zygænidæ	14	· ,,	8 ,,
Thyrididæ	1	,,	1 ,,
Pyralidæ	87	22	28 ,,
Ægeriadæ	6	•,	6 ,,
Hepialidæ	50	,,	2,,

* For explanation of the Plates see p. 508.

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Horace Knight del.et lith.

MOTHS FROM CENTRAL AFRICA.

P.Z.S. 1910, Pl. XXXVI.

West, Newman chr.





Horace Knight del.et lith.

West, Newman chr





Horace Knight delet lith.

West, Newman. chr.

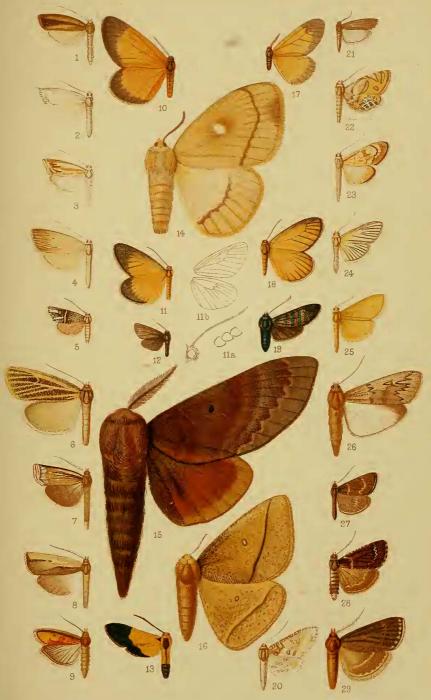


P. Z.S. 1910, Pl. XXXIX.



Horace Knight del.et lith.

West, Newman chr.



Torace Knight del.et lith.

West, Newman chr.

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P.Z.S. 1910. Pl. XLI.



MOTHS FROM CENTRAL AFRICA.

SYNTOMIDÆ.

CERYX ALBIMACULA Wlk. i. 128 (1854). Congo, Katanga, Kambove.

TRICHÆTA PTEROPHORINA Mab. Bull. Soc. Ent. Fr. 1892, p. 139. Congo, Lualaba R.; N.E. Rhodesia, Luangwa R., Chambezi R.

TRICHÆTA FULVESCENS Wlk. i. 132 (1854).

N.E. RHODESIA, Luangwa distr., Chinsala distr., Bangweolo distr., Chambezi R., Kalungwisi distr.

SYNTOMIS HEMIPHŒNICA, sp. n. (Pl. XXXVI. fig. 1.)

 \mathcal{S} . Head and thorax black with a faint metallic gloss; antennæ white at tips; frons white; tarsi whitish at base; abdomen crimson, the last three segments and the ventral surface black with a faint metallic gloss. Fore wing black with a faint metallic gloss; a wedge-shaped hyaline patch in cell, an oblique patch below vein 2 and elongate patches above veins 7, 6, 4, 3. Hind wing black with a faint metallic gloss; a large hyaline patch below the cell from before middle to near tornus and a round patch beyond the cell above vein 2.

Q. Abdomen with dorsal maculate black fascia on segments 3 to 5.

Hab. Congo, Kambove distr. (Neave), 1δ , $2 \Leftrightarrow$ type. Exp. 24 mm.

SYNTOMIS MIOZONA, sp. n. (Pl. XXXVI. fig. 2.)

Q. Head, thorax, and abdomen deep metallic green; from pure white; antennæ white at tips; pectus with lateral crimson patches; basal joint of tarsi white; abdomen with dorsal crimson patch at base. Fore wing deep metallic green; a hyaline patch below base of cell, wedge-shaped patch in end of cell, oblique patch below vein 2 and elongate patches above vein 6 and below veins 4 and 3; cilia white below apex. Hind wing deep metallic green with hyaline patches below the cell and beyond the cell between veins 4 and 2.

Hab. N.E. RHODESIA, Fort Jameson (Neave), 1 \bigcirc type. Exp. 40 mm.

Subsp. i. Wings more purplish black except costal area of fore wing; cilia not white below apex.

Hab. GERM. E. AFRICA, Magila, $3 \ Q$. Exp. 30 mm. Differs from S. ceres in the frons being white.

SYNTOMIS CROCEIZONA, sp. n. (Pl. XXXVI. fig. 3.)

 \mathcal{Q} . Head, thorax, and abdomen black shot with metallic green; tarsi with the basal joint white; abdomen with orange-red dorsal patch at base. Fore wing black shot with purple, the costal area with a metallic green tinge; a small hyaline spot below the cell near base, a quadrate patch in end of cell, an oblique patch below vein 2 and elongate spots above vein 6 and below veins 4 and 3; cilia white towards apex. Hind wing black shot with purple, a hyaline patch below the cell and small spot between veins 4, 3.

Ab. 1. Wings shot with metallic green instead of purple.

Hab. N.W. RHODESIA, Alala plateau (*Neave*), 4φ ; N.E. RHODESIA, Bangweolo distr. (*Neave*), 1φ , Kalungwisi valley (*Neave*), 2φ type. *Exp.* 30 mm.

Differs from S. ceres in being without the scarlet patches on pectus.

SYNTOMIS CERBERA Linn. Mus. Ulr. p. 363 (1764).

Congo, Katanga, Kambove; N.E. RHODESIA, Luangwa distr., Bangweolo distr., Chambezi R., Tanganyika plateau, Lofu valley.

SYNTOMIS TOMASINA Butl. Journ. Linn. Soc., Zool. xii. p. 348 (1876).

Congo, Katanga, Kambove.

SYNTOMIS ENDOCROSSIS Hmpsn. A. M. N. H. (7) xi. p. 338 (1903).

Congo, Katanga, Kambove.

SYNTOMIS MARINA Butl. Journ. Linn. Soc., Zool. xii. p. 348 (1876).

N.E. RHODESIA, Kalungwisi distr.

ERESSA PLEUROSTICTA, sp. n. (Pl. XXXVI. fig. 4.)

Q. Head, thorax, and abdomen dark brown; antennæ white at tips; shoulders with yellow patches; fore legs with the extremities of tibiæ and the tarsi yellowish; abdomen with dorsal yellow band at base and ill-defined yellow lateral and sublateral spots on medial segments. Fore wing black-brown with quadrate hyaline patch in middle of cell, elongate oblique patch below vein 2, small patch above its base and postmedial patches above veins 6, 5, 4, 3. Hind wing black-brown with hyaline subterminal spots above and below vein 2 and smaller spot above vein 3.

Hab. Congo, Lualaba R. (Neave), $1 \ \bigcirc$ type. Exp. 30 mm.

PSEUDONACLIA PUELLA Boisd. Voy. Delegorgue, ii. p. 569 (1847). N.E. Rhodesia, Chambezi R.

THYRETES MONTEIROI Butl. Journ. Linn. Soc., Zool. xii, p. 359 (1876).

Congo, Katanga, Kambove.

METARCTIA LATERITIA Herr.-Schäff. Aussereur. Schmett. f. 274 (1855).

N.E. RHODESIA, Luangwa distr., Fort Jameson.

METARCTIA BURRA Schaus, Lep. S. Leone, p. 23, pl. i. f. 6 (1893).

Congo, Katanga, Kambove.

METARCTIA FLAVIVENA Hmpsn. Ann. S. Afr. Mus. i. p. 40 (1900).

PORTUGUESE E. AFRICA, Makanga distr.

PSEUDAPICONOMA NIGRIPENNIS Auriv. Ark. f. Zool. ii. 4, p. 30 (1904).

Congo, Katanga, Kambove.

PSEUDAPICONOMA FENESTRATA Jord. Nov. Zool. xi. p. 442 (1904). Congo, Katanga, Kambove.

Genus PSEUDMELISA, nov.

Type, P. chalybsa.

Proboscis absent; palpi small, porrect; antennæ of female laminate; tibiæ with minute terminal pairs of spurs; abdomen very elongate. Fore wing narrow and elongate, the termen very obliquely curved; vein 3 from before angle of cell; 4, 5 stalked; 6 from upper angle; 7, 8, 9, 10 stalked, 10 from beyond 7; 11 from cell. Hind wing small; vein 3 from before angle of cell, 4, 5 from angle; 6, 7 coincident.

PSEUDMELISA CHALVBSA, sp. n. (Pl. XXXVI. fig. 5.)

9. Head and thorax black slightly irrorated with metallic blue; shoulders and pectus at sides with crimson spots; abdomen black with a slight metallic blue gloss; a crimson dorsal band at base and lateral patches on the next four segments, a slight yellow dorsal spot on 6th segment, the two terminal segments dorsally yellow, the anal tuft crimson. Fore wing brilliant metallic blue. Hind wing black shot with metallic blue. Hab. Congo, Kambove distr. (Neave), 1 9 type. Exp. 46 mm.

EUCHROMIA LETHE Fabr. Syst. Ent. p. 553 (1775).

Congo, Katanga, Kambove.

EUCHROMIA SPERCHIA Cram. Pap. Exot. ii. pl. 146, f. C (1777). Congo, Katanga, Kambove.

ARCTIADÆ.

LITHOSIANÆ.

ILEMA ELEGANS Butl. Trans. Ent. Soc. 1877, p. 347.

Subsp. restricta, nov.

Abdomen dorsally orange; male with the terminal band of fore wing much narrower, of hind wing hardly more than a line; female with the band of fore wing narrowing to a point at tornus; hind wing without band.

Hab. N.E. RHODESIA, E. Luangwa distr. (*Neave*), 2σ , 1φ type. *Exp.* σ 32, φ 38 mm.

ILEMA HETEROGYNA, sp. n. (Pl. XXXVI. fig. 6.)

 \mathcal{S} . Head and tegulæ orange-yellow; thorax fuscous brown with a greyish tinge; pectus and legs yellow, the fore and mid tibiæ and tarsi, the hind tibiæ at extremity and tarsi towards extremity black above; abdomen orange-yellow, dorsally blackish on basal half. Fore wing fuscous grey, the costal area yellow narrowing to a point at apex. Hind wing fuscous brown with some orange suffusion on disk and inner area; cilia yellow; the underside orange-yellow, the termen suffused with fuscous except at apex and towards tornus, some fuscous irroration in cell and below costa.

 \mathcal{Q} . Fore wing paler, the cilia yellow; hind wing yellow.

Hab. N.E. RHODESIA, Serenji distr. (Neave), 1 3, 1 9 type. Exp. 3 39, 9 32 mm.

Genus PSEUDLEPISTA, nov.

Type, P. atrizona.

Proboscis fully developed; palpi porrect, short, not reaching as far as the large rounded frontal prominence; antennæ of male bipectinate, with very short branches, of female typically very minutely serrate; fore tibiæ very short, with short outwardly curved claw on outer side at extremity. Fore wing with vein 2 from towards angle of cell, straight; 3, 4 stalked; 5 absent; 6 from upper angle; 7, 8, 9 stalked, 7 from before 9; 10, 11 typically stalked or from a point, 11 bent upwards and touching 12. Hind wing with vein 2 from towards angle of cell; 3, 4 strongly stalked; 5 absent; 6, 7 stalked; 8 from middle of cell.

PSEUDLEPISTA ATRIZONA, sp. n. (Pl. XXXVI. fig. 7.)

Head orange, the palpi, sides of frons, and antennæ black; thorax black, the tegulæ with some orange on edges, the patagia orange with black upper edge; coxæ and fore femora at extremities with some orange; abdomen orange, dorsally black at base. Fore wing orange with broad black terminal band expanding into a large rounded patch on apical area. Hind wing orange with black terminal band, broad at costa, narrowing to a point at ternus.

Hab. N.E. RHODESIA, Serenji distr. (Neare), 1 ♂, 1 ♀ type. Exp. 22 mm.

PSEUDLEPISTA FLAVICOSTA, sp. n. (Pl. XXXVI. fig. 8.)

Antennæ of female ciliated; fore wing with vein 11 well separated from 10 and anastomosing with 12.

 \mathcal{Q} . Head and thorax orange, the metathorax with a whitish

1910.]

patch; palpi with the 3rd joint black; fore legs, mid tibiæ and tarsi and hind tibiæ at extremity, and the tarsi brown above; abdomen pale yellow. Fore wing very pale yellow, the inner area more ochreous, the costal edge orange. Hind wing very pale yellow. Underside of fore wing and costal area of hind wing more orange, the disk of fore wing tinged with fuscous.

Hab. Congo, Katanga distr. (Neare), 1 9 type. Exp. 34 mm.

CARIPODIA CHRYSARGYRIA Hmpsn. Cat. Lep. Phal. B. M. ii. p. 248 (1900).

Congo, S.E. Katanga; N.E. RHODESIA, E. Luangwa distr.

ANAPHOSIA CYANAGRAMMA Hmpsn. A. M. N. H. (7) xi. p. 344 (1903).

Congo, S.E. Katanga.

ANAPHOSIA ASTRIGATA, sp. n. (Pl. XXXVI. fig. 30.)

Head orange; antennæ black; thorax yellowish white, the tegulæ edged with orange; pectus and legs orange, the fore femora blackish above, mid tibiæ streaked with black, the tarsi blackish; abdomen orange. Fore wing silvery yellowish white; the costa black; an oblique black medial line slightly bent outwards to inner margin; postmedial line black, oblique to vein 2, then erect, joined at vein 5 by a curved black line from costa before apex; cilia orange. Hind wing orange-yellow. Underside of fore wing suffused with brown except terminal half of costal area and terminal area.

Hab. Congo, Katanga distr. (Neave), $2 \leq 2 \leq 2 \leq 3$; MASHONALAND, Salisbury (Marshall), $1 \notin$ type. Exp. 34-44 mm.

ANAPHOSIA PECTINATA, sp. n. (Pl. XXXVI. fig. 31.)

Antennæ of male bipectinate, with short branches ending in a bristle, of female scrrate.

Head, thorax, and abdomen orange; sides of frons with black patches; antennæ black; fore and mid tibiæ above and the tarsi black. Fore wing yellow; the costa and inner margin except at base narrowly black; a black medial line, excurved from costa to middle of cell, then oblique and slightly sinuous; a black postmedial line, slightly excurved below costa, then oblique and slightly excurved in submedian interspace, a black streak from it in discal fold bent upwards to costa before apex, its angle connected or nearly connected with termen and with an oblique black streak from postmedial line to termen below vein 4, a terminal black line; cilia black at base, yellowish at tips. Hind wing orange with narrow black terminal band, its inner edge somewhat diffused inwards between veins 6 and 3.

Hab. Congo, Kambove distr. (Neave), 2 d, 1 Q type. Exp. 36-38 mm.

[Mar. 1,

ANAPHOSIA EURYGRAPHA, sp. n. (Pl. XXXVI. fig. 32.)

J. Head, tegulæ, and patagia pale yellow; frons with black bands; antennæ brown; neck black; dorsum of thorax dark brown: fore femora at extremities, fore and mid tibiæ, hind tibiæ at extremities, and the tarsi dark brown; abdomen dorsally dark brown, ventrally orange. Fore wing yellowish white; the costa and inner margin except at base black; a narrow medial black band, oblique below median nervure and connected by a streak on median nervure with the narrow black postmedial band which is slightly excurved below costa, then oblique and slightly excurved in submedian interspace, with a black fascia from it in discal fold bent upwards to costa before apex, its angle expanding into a patch to near termen, an oblique black fascia from postmedial line to termen below vein 4; termen and cilia black. Hind wing orange; a broad terminal black band narrowing to tornus and with a blackish line just before its inner edge between vein 6 and submedian fold; the underside with narrow black terminal line.

Hab. N.E. Rhodesia, Serenji distr. (Neave), 1 J type. Exp. 36 mm.

PHILENORA UNICOLOR Hopff. Monatsber. Akad. Berl. 1857, p. 422.

N.E. RHODESIA, upper Luangwa valley.

ARCTIAN.E.

DIACRISIA PUNCTULATA Wilgrn. Wien. Ent. Mon. iv. p. 161 (1860).

N.E. RHODESIA, upper Luangwa valley, E. Luangwa distr.

DIACRISIA MACULOSA Stoll, Pap. Exot. iv. pl. 370. f. B (1781).

N.W. RHODESIA, Alala plateau.

DIACRISIA DIPLOSTICHA Hmpsn. Ann. S. Afr. Mus. ii. p. 57 (1900).

N.E. RHODESIA, E. Luangwa distr.

DIACRISIA LUTESCENS Wlk. iii. 672 (1855).

Congo, Katanga, Kambove.

ACANTHARCTIA TENUIFASCIATA, sp. n. (Pl. XXXVI. fig. 33.)

 \mathcal{S} . Frons yellow, the vertex of head and thorax white; palpi black above; antennæ black, the shaft white above on basal half; legs yellow, the tibiæ and tarsi brown above; abdomen white at base, then yellow with dorsal brown bands. Fore wing white; the costal edge yellow; the interspaces with faint brownish fasciæ, the fascia in discal fold from middle of cell to termen and the fascia above vein 6 more distinct. Hind wing pure white.

Hab. Congo, Katanga distr. (Neave), 2 & type. Exp. 38 mm.

TERACOTONA EUPREPIA Hmpsn, Ann. S. Afr. Mus. ii. p. 58 (1900).

Congo, Katanga, Kambove; N.W. RHODESIA, Alala plateau.

TERACOTONA RHODOPHÆA, Wlk. XXXI. 302 (1864). N.W. Rhodesia, Petauke distr.

UTETHEISA CALLINA Swinh. A. M. N. H. (7) xix. p. 202 (1907). Conco, Katanga, Kambove.

UTETHEISA PULCHELLA Linn. Syst. Nat. i. p. 534 (1758).

PORTUGUESE E. AFRICA, Nyanji; N.E. RHODESIA, E. Luangwa distr., Feira, upper Luangwa valley.

SECUSIO STRIGATA, Wlk. ii. 559 (1854).

N.E. RHODESIA, E. Luangwa distr., N. Luangwa, Mt. Ulungu.

SECUSIO ATRIZONATA, sp. n. (Pl. XXXVI. fig. 34.)

 σ . Head and thorax orange with black streaks on vertex and sides of head and vertex of thorax and patagia and spots on frons and tegulæ; palpi black except at base; the antennæ black with the shaft white above except towards tips; legs striped fuscous and whitish; abdomen orange with lateral and sublateral series of black points, the ventral surface whitish. Fore wing brown suffused with grey, the veins and discal and submedian folds on basal half streaked with whitish; a small whitish spot in end of cell; cilia greyish at tips. Hind wing orange with black terminal band, rather broad from apex to vein 2, then narrow to vein 1 where it terminates; cilia orange, whitish at tips, tinged with fuscous at base towards tornus. Underside of fore wing orange, the terminal area black from costa beyond middle to inner margin near tornus, its inner edge slightly irregular.

Hab. N.E. RHODESIA, Tanganyika plateau, Lofu valley (Neave), 1 & type. Exp. 44 mm.

AGARISTIDÆ.

XANTHOSPILOPTERYX POGGEI Dewitz, Mitth. Ent. Ver. iii. p. 31, pl. 2. f. 3 (1879).

Congo, Katanga, Kambove.

XANTHOSPILOPTERYX PERDIX Druce, P. Z. S. 1887, p. 668. N.E. RHODESIA, E. Luangwa distr.

XANTHOSPILOPTERYX INDECISA Butl. A. M. N. H. (6) vii. p. 50 (1891).

N.E. RHODESIA, E. Luangwa distr.

XANTHOSPILOPTERYX AFRICANA Butl. A. M. N. H. (4) xv. p. 142 (1875).

N.E. RHODESIA, upper Luangwa valley, E. Luangwa distr.

[*Xanthospilopteryx africana* Butl. and allied species are common everywhere during the wet season from October to April. They are diurnal in their habits and have a rather powerful flight. They are very conspicuous on the wing and almost certainly form the models for butterflies such as *Euphædra crawshayi* Butl. and allied species.—S. A. N.]

XANTHOSPILOPTERVX SUPERBA Butl. A. M. N. H. (4) xv. p. 141, pl. 13. f. 3 (1875).

Congo, Katanga, Kambove. The form with yellow hind wing. N.E. RHODESIA, E. Luangwa distr., Luangwa valley, upper Luangwa valley, Mpika, Bangweolo distr.; PORTUGUESE E. AFRICA, Makanga distr. The form with crimson hind wing.

XANTHOSPILOPTERYX ATRIVENTRALIS, sp. n. (Pl. XXXVI. fig. 13).

J. Head and thorax black; 1st and 2nd joints of palpi, sides of frous, vertex of head and tegulæ at middle and sides with raired white points; patagia with yellowish spots; tibiæ with yellowish bands, the femoro-tibial joints and tarsi with white points; abdomen black with dorsal and lateral yellow bands, the ventral surface black. Fore wing black with oblique silvery blue bar in middle of cell with slight streaks above and below it, a discoidal lunule and short streak on middle of vein 2; a subbasal vellow spot below costa, elongate antemedial spot below costa and small spot above vein 5, a spot in middle of cell and medial spot above vein 1; an oblique yellow band from below middle of costa to vein 1 towards tornus, dilated at vein 2 and ending in a point; an oblique subapical band from below costa to vein 3 near termen, its extremities rounded, and a small subterminal spot above vein 1; cilia white at apex. Hind wing scarlet with black terminal band expanding somewhat towards apex and at vein 2; cilia whitish at apex; the underside with the costa narrowly black to near base.

Hab. N.E. RHODESIA, Serenji distr. (Neave), 1 3 type. Exp. 56 mm.

XANTHOSPILOPTERYX DISCOSTICTA, sp. n. (Pl. XXXVI. fig. 23.)

 \mathcal{S} . Head and thorax black; 1st and 2nd joints of palpi, sides of frons, and back of head with white points; gulæ white; tegulæ, shoulders, and patagia with yellowish white points, the last with some yellowish at tips; tibiæ with yellow bands, the base and extremities of tibiæ and the tarsi with white points; altdomen orange-yellow tinged with fuscous, the extremity and ventral surface black, sublateral and ventral series of small yellow spots. 1910.]

Fore wing black; whitish points at base below costa and cell; a large triangular antemedial yellow patch extending from below costa to vein 1; an oblique band from below middle of costa to above tornus, constricted just below the cell and rather pointed at lower extremity; a broad band from below costa beyond middle to near termen below vein 3, where its extremity is pointed and somewhat recurved; three obliquely placed small yellow spots across apical area and a subterminal spot in submedian fold; oblique silvery blue lines in and below middle of cell and on discocellulars; cilia with a series of white spots. Hind wing scarlet with black discoidal striga and terminal band slightly angled inwards at vein 2; the cilia with series of white spots. Underside of fore wing with the yellow markings tinged with scarlet; hind wing with small subapical patch of yellow scales.

Hab. N.W. RHODESIA, Alala plateau (Neave), 1 & type. Exp. 64 mm.

XANTHOSPILOPTERYX NEAVI, sp. n. (Pl. XXXVI. fig. 14.)

9. Head and thorax black; 1st and 2nd joints of palpi, frons, and back of head with white points; gulæ white; tegulæ, shoulders, and patagia with white points; tibiæ banded with orange, the tibiæ at base and extremity and the tarsi ringed with white; abdomen orange-yellow tinged with fuscous the extremity blackish above, a lateral series of black points. Fore wing black; some small whitish spots below base of costa and two subbasal spots below the cell; a triangular yellow antemedial spot in cell, slight mark below the cell, and wedge-shaped mark above vein 1; a broad oblique bar across end of cell, expanding at lower extremity, and oblique patch below end of cell; an oblique band from below costa beyond middle to near termen at vein 3, somewhat constricted at vein 5 and its inner edge excised at vein 4: a subterminal spot above tornus; a silvery blue striga in middle of cell and some scales below the cell and on discocellulars; cilia white at apex. Hind wing crimson with black terminal band somewhat angled inwards at vein 2; the cilia white at apex ; the underside with the black extending on costa to middle. Hab. N.E. RHODESIA, Chinsali distr. (Neave), 1 & type. Exp.

72 mm.

XANTHOSPILOPTERYX EMULATRIX Westw. Oates' ' Matabeleland,' p. 355 (1881).

Congo, Katanga, Kambove.

XANTHOSPILOPTERYX FLAVIPENNIS Bartel. Verh. Ges. Wien, liii. p. 121 (1903).

Congo, Katanga, Kambove.

XANTHOSPILOPTERYX HORNIMANNI Druce, Ent. Mo. Mag. xvi. p. 269 (1880).

Coxgo, Katanga, Kambove.

POLACANTHOPODA TIGRINA Druce, P. Z. S. 1882, p. 778, pl. 60. f. 4.

Conco, Katanga, Kambove.

ANDRHIPPURIS CAUDEQUINA Karsch, Ent. Nachr. xxi. p. 358, pl. 1. ff. 1, 2 (1895).

Congo, Katanga, Kambove.

[Andrhippuris caudequina Karsch. This species, in common with many other diurnal moths, appeared in considerable numbers at the beginning of the rainy season in October. I met with it only in Katanga, never in Northern Rhodesia.—S. A. N.]

CHARILINA AMABILIS Drury, Ill. Ex. Ent. ii. pl. 13. f. 3 (1773).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley, Chinsali distr., Fort Jameson.

PSEUDOSPIRIS PAIDIFORMIS Butl. P. Z. S. 1895, p. 267, pl. xv. ff. 8, 9.

N.E. RHODESIA, Chambezi valley, Chinsali distr.

PAIS NYASSANA Bartel. Verh. Ges. Wien, liii. p. 128 (1903). Congo, Katanga, Kambove.

ÆGOCERA AFFINIS Druce, Ent. Mo. Mag. xx. p. 155 (1883). N.E. Rhodesia, E. Luangwa distr.

ÆGOCERA GEOMETRICA, sp. n. (Pl. XXXVI. fig. 15.)

2. Head white, black at sides; palpi chocolate-red fringed with yellow and brown hair, the extremity of 2nd joint white, the 3rd joint white at base, black at tip; antennæ black with some white above; thorax chocolate-red with white patches on shoulders and metathorax; pectus and legs orange, the fore and mid femora with some black above and the tibiæ with black spots, the terminal joints of tarsi black above; abdomen orange with dorsal black patch at base. Fore wing chocolate-red; the costa black irrorated with white, the costal edge white except towards base; an oblique white streak from below base of costa to vein 1 beyond middle, where it is met by a narrow white band from costa; cilia white. Hind wing orange with broad black terminal band; cilia yellow at tips. Underside of fore wing yellow with the terminal area black-brown, a round black spot in end of cell almost confluent with a black bar beyond the cell angled inwards below its extremity.

Hab. Congo, Kambove distr. (Neave), 1 9 type. Exp. 42 mm.

ÆGOCERA MENETE Cram. Pap. Exot. i. pl. 70. f. D (1775). Congo, Katanga, Kambove. ÆGOCERA TRICOLORA B. Baker, A. M. N. H. (8) iii. p. 434 (1909).

Congo, Katanga, Kambove; N.E. RHODESIA, Kapopo.

ÆGOCERA DISPAR Roths. Nov. Zool. iii. p. 43. pl. 15. ff. 27, 28 (1896).

Congo, Katanga, Kambove.

LOPHONOTIDIA NOCTURNA Hmpsn. Cat. Lep. Phal. B. M. iii p. 617 (1901).

N.E. RHODESIA, E. Luangwa distr.

Genus Hoplarista, nov.

Type, H. hæmaplaga.

Proboscis fully developed; palpi with the 2nd joint obliquely upturned and moderately fringed with hair, the 3rd porrect, rather long and somewhat dilated at extremity; frons with long flattened corneous process at middle, bifid at extremity, and corneous plate below it excised in front; eyes large, round; antenne slightly dilated towards extremity; thorax clothed with hair and scales mixed, the metathorax with spreading crest; tibiæ moderately fringed with hair; abdomen with hairy crest at base only. Fore wing with the apex rounded, the termen evenly curved and not crenulate; veins 3 and 5 from near angle of cell; 6 from upper angle; 9 from 10 anastomosing with 8 to form the areole; 11 from cell. Hing wing with veins 3,4 from angle of cell; 5 obsolescent from middle of discocellulars; 6,7 from upper angle; 8 anastomosing with the cell near base only.

HOPLARISTA HÆMAPLAGA, sp. n. (Pl. XXXVI, fig. 24.)

d. Head and thorax dark chocolate-brown mixed with pale vellow and some orange; frons with lateral yellowish white spots above; pectus orange; legs banded black and orange; abdomen banded black and orange, the ventral surface dark brown with series of yellow bars. Fore wing dark chocolate-brown irrorated with silvery blue and some yellow scales; a triangular yellow antemedial patch in cell with elongate blood-red patch below it. connected with the oblique yellow medial band extending from below costa to submedian fold, edged by blood-red at sides, its inner edge slightly angled inwards at median nervure and submedian fold and its outer edge strongly dilated below; a postmedial yellow patch from below costa to vein 2, rounded above and its lower extremity pointed and bent inwards. Hind wing deep orange; a slight black discoidal lunule; a black-brown terminal band, its inner edge slightly incurved at discal fold and strongly at vein 2; a small yellow spot on termen at submedian Underside of fore wing yellow, the costa black-brown fold. except towards base, a black-brown and red spot in middle of cell with red spot below it in submedian interspace, a large

lumulate discoidal patch connected with the dark costa and with some dark suffusion below it, a broad dark terminal band expanding towards apex and interrupted by yellow below vein 2; hind wing with the costa black-brown to near base.

 \Diamond . Fore wing with the antemedial patch in cell red with slight yellow spot on it, widely separated from the medial band which is narrower and less dilated below, the postmedial patch not extending below vein 4 where it is somewhat pointed on outer side; hind wing with the terminal band broader and without yellow spot at submedian fold.

Hab. N.E. RHODESIA, Lake Bangweolo (*Neare*), $1 \ge 1 + 2$ type. *Exp.* ≥ 50 , ≥ 52 mm.

TUERTA OVIFERA, sp. n. (Pl. XXXVI. fig. 25.)

9. Head and thorax black-brown; palpi with the 2nd joint white in front towards base, the 3rd joint white at base; sides of frons and streaks on tegulæ and patagia yellowish white; pectus and base of legs yellow, the tibiæ banded with yellow; abdomen orange-yellow with dorsal black-brown stripe, the ventral surface black-brown with white bands. Fore wing deep chocolate-brown, the terminal area irrorated with grey-white scales; a pale yellow wedge-shaped patch in and below cell from base to origin of vein 2, its upper edge excised towards extremity; a minute triangular vellow spot in upper end of cell; an oblique elliptical pale yellow postmedial patch from below costa to below vein 3; some silvery scales below costa near base; oblique greyish bars with silvery scales on them in middle of cell and on discocellulars; postmedial line double, the inner line grey, the outer silvery, obliquely excurved round the yellow patch from costa to vein 2, then angled inwards to below end of cell and again excurved : cilia grevish, silvery at tips. Hind wing deep orange with broad black-brown terminal band; cilia brownish at base, white at tips. Underside of fore wing with the basal half orange with small black spot in end of cell.

Hab. N.E. RHODESIA, E. Luangwa distr. (Neave), 2 \heartsuit type. Exp. 48-54 mm.

OMPHALOCEPS DARIA Druce, A. M. N. H. (6) xv. p. 42 (1895).

N.E. RHODESIA, E. Luangwa distr.

HESPAGARISTA CAUDATA Dewitz, Mitth. Münch. Ent. Ver. iii. p. 30, pl. i. ff. 3, 3α (1879).

Congo, Katanga, Kambove; N.W. RHODESIA, Alala plateau.

[Hespagarista caudata, Dewitz. This seems a very local species which appears to prefer open grassy situations near water. -S. A. N.]

HESPAGARISTA RENDALLI Roths. Nov. Zool. iii. p. 97 (1896).

Congo, Katanga, Kambove; N.W. Rhodesia, Alala plateau; N.E. Rhodesia, Mpika, Mansya R., Bangweelo distr.

1910.]

MASSAGIDIA HESPARIA Cram. Pap. Exot. i. pl. 56. f. C (1775). Congo, Katanga, Kambove.

MASSAGIDIA TENUIFASCIA, sp. n. (Pl. XXXVI. fig. 12.)

2. Head and tegulæ crimson, the 3rd joint of palpi and antennæ black; thorax and abdomen black slightly shot with blue, the terminal segments of abdomen crimson; pectus in front and fore femora crimson. Fore wing black shot with blue, the veins and submedian fold streaked with brilliant blue, a rather broad medial white band, oblique from costa to lower angle of cell, then erect; cilia white at apex. Hind wing black shot with blue; a medial white band narrowing to inner margin and with its outer edge curved; cilia white at apex.

One specimen has veins 6, 7, 8, $\hat{9}$, 10 of fore wing stalked.

Hab. Congo, Kambove distr. (Neave), 3 9 type. Exp. 48-54 mm.

NOCTUIDÆ.

AGROTINÆ.

CHLORIDEA OBSOLETA Fabr. Ent. Syst. iii. 1. p. 456 (1793).

Congo, Katanga, Kambove; N.W. Rhodesia, Alala plateau; Portuguese E. Africa, Chinde.

CHLORIDEA FLAVIGERA Hmpsn. A. M. N. H. (7) xix. p. 248 (1907).

N.E. RHODESIA, Luangwa valley.

TIMORA ALBIPUNCTA, sp. n. (Pl. XXXVI. fig. 28.)

Antennæ of male serrate.

Head, thorax, and abdomen ochreous yellow. Fore wing ochreous yellow, with blood-red or purplish-red markings; costal edge red; a diffused red antemedial line angled outwards in submedian fold where there is a spot beyond it: a small spot in middle of cell and discoidal lunule constricted at middle; a diffused subterminal band with series of white points near its outer edge, oblique from below apex to discal fold, then excurved and formed of somewhat dentate marks to submedian fold where there is a small spot before it; a terminal series of red points. Hind wing white, the terminal area tinged with yellow.

Hab. N.E. RHODESIA, upper Luangwa valley (Neave), 1 , 3, 1 type. Exp. 26 mm.

TIMORA LANCEOLATA Wlk. XXXIII. 767 (1865).

Congo, Katanga, Kambove.

TIMORA DAPHŒNA, sp. n. (Pl. XXXVI. fig. 29.)

J. Head and thorax deep pink; palpi fuscous; antennæ brownish; pectus and legs ochreous white tinged with pink; PROC. ZOOL. SOC.—1910, No. XXVI. 26

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abdomen ochreous white. Fore wing deep glossy pink; costal edge whitish; median nervure and bases of veins 4, 3 white; a white fascia in submedian fold, another in discal fold from end of cell to near termen, and a short streak above terminal part of vein 6; cilia brownish tinged with pink and with fine white line at base. Hind wing ochreous white, the termen faintly tinged with pink; the underside with the costal area tinged with pink.

Hab. N.E. RHODESIA, upper Luangwa valley (Neare), $2 \eth$ type. Exp. 34 mm.

Adisura atcinsoni Moore, P. Z. S. 1881, p. 368, pl. 37, f. 6.

N.E. RHODESIA, LUANGWA.

AGROTIS LEUCOGASTER Frr. Nen. Beitr. Schmett. i. p. 38, pl. 21 (1831).

N.E. RHODESIA, Serenji distr.

HADENIN.E.

CHABUATA RUFILINEA, sp. n. (Pl. XXXVI. fig. 35.)

 \mathcal{S} . Head, thorax, and abdomen yellow tinged with rufous. Fore wing yellow invorated with rufous, the veins of terminal half streaked with rufous; antemedial line rufous, slightly bent inwards to costa, then erect; a slight rufous discoidal striga; postmedial line rufous, slightly bent outwards below costa, then oblique; subterminal line rufous, slightly excurved at vein 7 and bent outwards to tornus; a fine rufous terminal line. Hind wing pale yellow slightly tinged with brown except on basal and costal areas; a fine brown terminal line; cilia yellow; the underside yellowish white.

Hab. N.W. RHODESIA, Alala plateau (Neave), 1 3 type. Exp. 30 mm.

DIAPHONE EUMELA Stoll, Pap. Exot. iv. pl. 347. f. G (1781). N.E. RHODESIA, Lukashashi R.

CIRPHIS LOREYI Dup. Lép. Fr. vii. p. 81, pl. 105. f. 7 (1827). Congo, Katanga distr.

CIRPHIS NEBULOSA Hmpsn. Ann. S. Afr. Mus. ii. p. 274 (1902). N.E. Rhodesia, Luangwa valley.

CIEPHIS DIALEUCA, sp. n. (Pl. XXXVI. fig. 36.)

 σ . Abdomen with lateral tufts of black hair from base; wings on underside suffused with silvery scales.

Head and thorax brownish ochreous tinged with dark brown; tegulæ with two dark medial lines and a line near tips; abdomen whitish tinged with ochreous brown, the lateral tufts from base black. Fore wing pale pink irrorated with a few black scales, the 1910.]

costal edge ochreous, the veins finely streaked with white, the median nervure and vein 4 to near termen with a stronger streak defined above and below by brownish ochreous, the veins of terminal half defined by fine blackish streaks and the interspaces of terminal half with fine black streaks; a black point at lower angle of cell; a diffused oblique whitish fascia from apex to beyond lower angle of cell; a fine black terminal line; cilia white at base and with three fine brown lines through them. Hind wing white, the veins and terminal area except towards apex suffused with silvery scales except basal costal and inner areas; the costa pink; a terminal series of black points.

Hab. N.E. RHODESIA, Luangwa valley (Neare), 1 &, E. Luangwa distr. (Neare), 2 & type. Exp. 36 mm.

CIRPHIS POLYRHABDA Hmpsn. Cat. Lep. Phal. B. M. v. p. 507, pl. 92. f. 13 (1905).

N.W. RHODESIA, Alala plateau.

CIRPHIS INSULICOLA Guen. Noct. i. p. 82 (1852).

N.W. RHODESIA, Alala plateau.

CIRPHIS PHÆA Hmpsn. Ann. S. Afr. Mus. ii. p. 275 (1902).

N.E. RHODESIA, Luangwa valley, Kalungwisi valley.

CIRPHIS CORTICEA, sp. n. (Pl. XXXVI. fig. 19.)

Q. Head and thorax purplish brown mixed with black and some greyish; abdomen grey-brown. Fore wing purplish red-brown thickly irrorated with black; antemedial line indistinct, blackish, excurved; a black discoidal striga; postmedial line blackish, oblique and slightly sinuous from costa to vein 4, then inwardly oblique, a series of minute black streaks followed by minute white streaks beyond it on the veins. Hind wing grey-brown.

Hab. N.E. RHODESIA, upper Luangwa valley (Neave), $1 \circlearrowright$ type. Exp. 32 mm.

BOROLIA TORRENTIUM Guen. Noct. i. p. 88 (1852).

N.E. RHODESIA, Luangwa valley.

BOROLIA ROSESCENS, sp. n. (Pl. XXXVI. fig. 9.)

Q. Head and thorax pink mixed with some white; abdomen white tinged with ochreous, ventrally suffused with pink. Fore wing pink, the costal edge white; a blackish point at lower angle of cell; a fine whitish line at base of cilia. Hind wing pure white; the underside with the costal area suffused with pink and sparsely irrorated with black, a terminal series of black points from apex to vein 3.

Hab. N.E. RHODESIA, Lake Bangweolo (Neare), 1 9 type. Exp. 40 mm.

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CUCULLIANÆ.

RHODOCHLÆNA CUNEIFERA, Sp. n. (Pl. XXXVI. fig. 18.)

Antennæ of male bipectinate, with moderate branches to apex.

J. Head and thorax dark brown mixed with some rufous and grey; tarsi ringed with white; abdomen dark red-brown mixed with grey. Fore wing rufous mixed with some greyish, the medial area dark brown except towards costa; subbasal line represented by a black striga from costa and a small angled white mark defined below by black below the cell, with a dark shade from it to inner margin; antemedial line indistinctly double filled in with rufous, excurved below costa and obliquely excurved from cell to inner margin; orbicular and reniform rufous mixed with whitish and with silvery white annuli defined by black, open above, confluent on median nervure, and the orbicular extending to well below the cell; postmedial line black defined on outer side by white, slightly bent outwards below costa, then minutely waved, incurved below vein 4, some white points beyond it on costa; subterminal line formed by slight white lunules defined on inner side by black lunules, slightly angled outwards at vein 7 and incurved at discal fold and below vein 3; a terminal series of slight white points; cilia chequered with white at tips. Hind wing vellowish white, the veins and costal and terminal areas suffused with red-brown; a brown spot at upper angle of cell; the underside yellowish white irrorated with red-brown except on basal inner area, a black spot on upper discocellular and minutely waved postmedial line.

Hab. Congo, Katanga, Kambove (Neave), 1 & type. Exp. 30 mm.

ACRONYCTINÆ.

TRACHEA CONSUMMATA Wlk. xi. 591 (1857).

N.E. RHODESIA, Fort Jameson.

MATOPO NIGRIVITTATA Hmpsn. Ann. S. Afr. Mus. ii. p. 291 (1902).

N.E. RHODESIA, Serenji distr.

DELTA PHŒNICRASPIS Hmpsn. Cat. Lep. Phal. B. M. ix. p. 521, pl. 148, f. 1 (1910).

N.W. RHODESIA, Kapopo.

PRODENIA LITURA Fabr. Syst. Ent. p. 501 (1775).

N.E. RHODESIA, E. Luangwa distr.

ATHETIS POLIOSTROTA Hmpsn. Cat. Lep. Phal. B. M. viii. p. 304, pl. 129. f. 13 (1909).

N.E. RHODESIA, upper Luangwa valley, Chinsali distr.

ATHETIS ATRILUNA Guen. Noct. i. p. 252 (1852). N.E. Rhodesia, Serenji distr.

ATHETIS SATELLITIA Hmpsn. Ann. S. Afr. Mus. ii. p. 302 (1902).

N.W. RHODESIA, Alala plateau.

ATHETIS CROCEIPUNCTA Hmpsn. Cat. Lep. Phal. B. M. viii. p. 343, pl. 130, f. 12 (1909).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley.

ARIATHISA EXCISA Herr.-Schäff. Aussereur. Schmett. f. 129 (1850).

N.E. RHODESIA, Tanganyika plateau.

ETHIOPICA POLYASTRA Hmpsn. Cat. Lep. Phal. B. M. viii. p. 419, pl. 133. f. 6 (1909).

Congo, Katanga, Kambove.

PROXENUS CAMPTOGRAMMA Hmpsn. Cat. Lep. Phal. B. M. ix, p. 523, pl. 148. f. 13 (1910).

N.W. RHODESIA, Alala plateau.

PERIGEA CAPENSIS Guen. Noct. i. p. 213 (1852).

N.E. RHODESIA, Luangwa valley; N.W. RHODESIA, Kapopo.

ETHIOTERPIA NEAVI Hmpsn. Cat. Lep. Phal. B. M. ix. p. 112 (1910).

N.E. RHODESIA, Tanganyika plateau.

HYPERCALYMNIA METAXANTHA Hmpsn. Cat. Lep. Phal. B. M. ix. p. 185 (1910).

Congo, S.E. Katanga.

CIRRODES PHŒNICEA Hmpsn. Cat. Lep. Phal. B. M. ix. p. 210 (1910).

N.E. RHODESIA, E. Luangwa distr.

CALAMISTIS FUSCA Hmpsn. Ann. S. Afr. Mus. ii. p. 296 (1902). Congo, S.E. Katanga.

SESAMIA EPUNCTIFERA Hmpsn. Ann. S. Afr. Mus. ü. p. 298 (1902).

N.E. RHODESIA, Luangwa valley.

MAZUCA STRIGUENCTA WIK. XXXV. 1777 (1866). N.E. RHODESIA, E. Luangwa distr. LEUCOVIS ALBA Roths. Nov. Zool. iv. p. 183 (1897).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley, Fort Jameson.

ERASTRIANÆ.

AMYMA RUPTIRENA, sp. n.

J. Head and thorax dark reddish brown mixed with some grev: pectus whitish: tibiæ and tarsi fuscous ringed with white: abdomen grey-brown, the ventral surface white at base. Fore wing red-brown suffused with dark grevish brown ; subbasal line represented by a whitish striga from costa; antemedial line brown slightly defined on outer side by whitish, somewhat sinuous, oblique from costa to median nervure beyond the fovea, then inwardly oblique; reniform broken up into small white spots of which the two at lower angle of cell are elongate, and with white striga above it from costa; postmedial line blackish, minutely dentate and produced to a series of white points, excurved from costa to vein 4, then oblique, some white points beyond it on costa; subterminal line indistinct, dark, with white bar from costa, excurved below vein 7 and at middle; a terminal series of minute black and white points. Hind wing dark greyish brown; a fine dark terminal line, and some whitish on termen at tornus; cilia with a fine pale line at base and whitish tips; the underside white irrorated with rufous especially on apical area, a blackish discoidal spot, postmedial line with minute dark streaks and white points at the veins, and terminal series of minute triangular black marks.

Hab. N.E. RHODESIA, Tanganyika plateau, Lofu valley (Neave), 1 & type. Exp. 26 mm.

Амума осто Guen. Noct. i. p. 233 (1852).

N.W. Rhodesia, Alala plateau, Kapopo; N.E. Rhodesia, E. Luangwa distr., N. Luangwa, Chambezi valley, Bangweolo distr., Mansya R.

AMVNA PUNCTUM Fabr. Ent. Syst. iii. 2. p. 34 (1794).

N.W. RHODESIA, Alala plateau, Kapopo; N.E. RHODESIA, E. Luangwa distr., N. Luangwa, Tanganyika plateau, Kalungwisi valley, Mansya R.

LITHACODIA BLANDULA Guen. Maillard's Réunion, Lép. p. 38 (1863).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley.

OZARBA CORNICULANS Wilgen, Wien, Ent. Mon. iv. p. 173 (1860).

N.E. RHODESIA, E. Luangwa distr., Chinsali distr.

OZARBA PERPLEXA Saalm. Lep. Madag. p. 281, f. 161 (1891).

N.E. RHODESIA, Luangwa R.

1910.]

OZARBA PHÆOCROA, sp. n.

S. Head and thorax dark brown slightly mixed with grey; tarsi blackish ringed with white; abdomen brownish ochreous irrorated with fuscous. Fore wing fuscous tinged with greyish and irrorated with black; traces of a double minutely waved black subbasal line from costa to submedian fold; antemedial line double, black filled in with greyish, minutely waved, oblique; orbicular absent; reniform with faint whitish annulus, narrow and constricted at middle; postmedial line indistinctly double filled in with grevish, excurved from below costa to vein 4, then slightly incurved and oblique to inner margin near tornus, some white points beyond it on costa; subterminal line indistinct, whitish very near termen, slightly excurved below vein 7 and at middle; a terminal series of small black lunules defined by a waved whitish line. Hind wing dark cupreous brown; a dark terminal line with faint pale spots before it; the underside brownish white thickly irrorated with black, a black discoidal spot, traces of a pale curved postmedial line, and a series of whitish spots just before termen.

Hab. Congo, Katanga, Kambove (Neave), 1 \Im type. Exp. 26 mm.

Ozarba hemimelæna, n. n.

Tarache transversa Pag. in Voeltzkow, Reis in Ostafrika, ii. p. 109, pl. 6. f. 18 (1907), nec Moore, 1884.

N.W. RHODESIA, Kafue R.; N.E. RHODESIA, Chambezi valley.

OZARBA HELIASTIS HIMPSD. AND. S. Afr. Mus. ii. p. 410 (1909). N.E. RHODESIA, E. Luangwa distr.

Ozarba subterminalis, sp. n.

 \mathcal{Q} . Head, thorax, and abdomen black-brown mixed with white; palpi, pectus, legs, and ventral surface of abdomen yellowish white irrorated with brown. Fore wing black-brown mixed with white; subbasal line white, oblique, dentate, from costa to median nervure; antemedial line double filled in with white and defined by white on outer side except at costa, slightly angled outwards below costa, then minutely waved; orbicular represented by minute obliquely placed white spots in cell and on median nervure with black points in centres; reniform with brown centre and white annulus, narrow, constricted at middle and rather oblique; postmedial line double filled in with white, oblique from costa to vein 6, then inwardly oblique, minutely waved and slightly angled outwards at vein 1, some white points beyond it on costa; subterminal line white, minutely waved, excurved below vein 7, incurved below vein 3 and bent outwards to tornus; a black terminal line defined on inner side by white except at apex. Hind wing orange, the base suffused with brown extending above vein 1 to the rather diffused dark postmedial line, with a diffused dark patch beyond it at apex; a black terminal line except at tornus; cilia white and black. Underside of fore wing yellow suffused and irrorated with brown, the inner area whitish, a dark discoidal spot, indistinct postmedial and subterminal lines, and a diffused apical patch; hind wing with the costal and inner areas irrorated with fuscous, a black discoidal spot, indistinct and incomplete postmedial line and diffused subterminal band.

 σ . Fore wing without white line before the terminal black points; hind wing with the brown suffusion at base slight, the subterminal band more or less interrupted and with streaks beyond it towards apex.

Hab. N.E. RHODESIA, upper Luangwa valley (*Neave*); MASHONA-LAND, Salisbury (*Marshall*), $1 \$ type ; BECHUANALAND, L. Ngami (*Lugard*), $1 \$; TRANSVAAL, Warmbad (*Janse*), $1 \$. *Exp.* 20– 24 mm.

OZARBA APICALIS, sp. n.

Head and thorax fuscous brown mixed with greyish; abdomen fulvous suffused with fuscous and with white segmental lines on basal segments; pectus, legs, and ventral surface of abdomen whitish irrorated with brown, the fore tibiæ and the tarsi black ringed with white. Fore wing reddish brown suffused and irrorated with fuscous and mixed with some whitish; subbasal line represented by slight obliquely placed whitish spots below costa and cell; antemedial line double filled in with white and defined on outer side by white, minutely waved and slightly curved; orbicular represented by obliquely placed whitish points defined by black in cell and on median nervure; reniform with brown centre and white annulus, narrow and slightly angled inwards on median nervure; an indistinct oblique waved dark line from lower angle of cell to inner margin; postmedial line double filled in with white, minutely waved, oblique from costa to vein 6, slightly incurved at discal fold, incurved below vein 4 and slightly angled outwards at vein 1, some white points beyond it on costa; subterminal line white, slightly angled inwards at discal fold, incurved below vein 3 and bent outwards to tornus towards which it is yellowish; a minutely waved black terminal line defined on inner side by yellow except at apex; cilia blackish with a white patch at apex. Hind wing deep orange; diffused brown streaks at base in and below cell and on inner area; a large black apical patch and obsolescent subterminal line; a black terminal line; cilia blackish with whitish patch at tips below apex. Underside of fore wing orange with black discoidal striga, postmedial point on costa, and apical patch with white points on costa and slight subterminal yellow marks, the patch extending subterminally to vein 4, a terminal series of minute black lunules; hind wing with the costal area irrorated with red, a black discoidal point, traces of a red postmedial line from costa to discal fold and with black points at costa and discal fold, subterminal

black band from costa to vein 4 with streaks beyond it towards apex.

Hab. BR. E. AFRICA, Bondoni plains (Crawshay), $1 \leq$, Machakos (Crawshay), $1 \leq$, $4 \Leftrightarrow$ type; N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley, Chambezi valley (Neave). Exp. 24-26 mm.

OZARBA HEMICHRYSEA, sp. n.

J. Head and thorax black mixed with some grey; palpi, pectus, and legs whitish irrorated with black, the tarsi banded with black; abdomen orange irrorated with black, ventually whitish irrorated with black. Fore wing blackish mixed with grey, the area towards tornus more purplish, the apical area chocolate-brown; a subbasal blackish mark on median nervure; antemedial line ill-defined, blackish, curved and slightly waved; orbicular represented by a whitish point above median nervure; reniform with slight incomplete whitish annulus faintly defined by black, constricted at middle; postmedial line double and filled in with ochreous white towards costa, slightly excurved from below costa to vein 4, then incurved and oblique to inner margin near tornus, some whitish points beyond it on costa; subterminal line represented by faint whitish and black marks, slightly excurved below vein 7 and ending on termen at submedian fold; a black terminal line defined on inner side by whitish; cilia with a whitish patch below apex. Hind wing orange, the costal area suffused with black-brown; a diffused black-brown streak in submedian fold, not reaching termen, and the inner margin suffused with black-brown; a black terminal line; cilia blackish with whitish patches at apex and discal fold. Underside of fore wing orange irrorated with black, a black discoidal spot and streak in submedian fold, a wedge-shaped patch from apical part of costa to submedian fold; hind wing with black discoidal spot, indistinct waved postmedial line, and rufous wedge-shaped patch from apex to vein 2 with black point below it on vein 1.

Hab. Congo, Katanga, Kambove (Neave), 1 3 type. Exp. 20 mm.

OZARBA CHRYSEIPLAGA, sp. n.

Q. Head yellowish mixed with black; palpi black at tips; thorax purplish fuscous; pectus and legs whitish mixed with brown, the tarsi blackish ringed with yellowish white; abdomen orange dorsally banded with fuscous, ventrally irrorated with black. Fore wing purplish fuscous, the outer half of medial area and the terminal area suffused with cupreous brown except towards inner margin; indistinct waved black antemedial and medial lines; reniform with faint whitish annulus slightly defined by black, constricted at middle; postmedial line black with a small whitish spot before it at costa, excurved from below costa to vein 4, then incurved, some slight whitish points beyond it on costa; subterminal line with oblique yellowish white mark from costa, then represented by faint dentate blackish and grey marks; a terminal series of black striæ; cilia white at tips towards apex. Hind wing black-brown with large orange patch on inner area from near base to beyond middle, not extending to inner margin, and expanding beyond the cell to vein 6, a dark streak on it on vein 1 and traces of a medial line; cilia whitish at tips at apex. Underside of fore wing with orange fascia on basal half of costa, a small spot beyond it before the oblique narrow orange postmedial band slightly excurved at middle; hind wing orange with black patch on middle of costa and a discoidal lunule, the terminal area black, expanding towards costa, its inner edge irregularly sinuous, a series of small yellowish white spots just before termen.

Hab. Coxgo, Katanga, Kambove (*Neave*), $1 \Leftrightarrow$ type. *Exp.* 20 mm.

EUSTROTIA ALBISIGNA, sp. n.

 \mathcal{Q} . Head, thorax, and abdomen brown mixed with grey, the last with the anal tuft and ventral surface whitish. Fore wing greybrown slightly irrorated with fuscous brown; antemedial line slight, brown, angled outwards below costa and in cell, then sinuous; claviform and orbicular absent; reniform with brown centre and white annulus, obsolescent on outer side above, oblique elliptical, some dark suffusion before it; postmedial line dark, bent outwards at vein 7, incurved at discal fold, oblique from vein 4 to submedian fold and bent outwards above inner margin, some white points beyond it on costa; subterminal line double, dark filled in with olive, minutely waved, excurved below vein 7 and at middle, an oblique dark shade before it from below costa to vein 4; a terminal series of black and white points. Hind wing dark grey-brown; a fine black terminal line; the underside whitish irrorated with brown, a slight discoidal point, curved postmedial line, and diffused subterminal shade.

Ab. 1. Fore wing with the reniform more triangular and filled in with white.

Hab. N.E. RHODESIA, Kalungwisi valley (*Neave*), $1 \Leftrightarrow$ type, Chambezi valley (*Neave*), $1 \Leftrightarrow$. *Exp.* 24 mm.

EUSTROTIA MICROPIS, sp. n.

 \mathcal{S} . Head, thorax, and abdomen dark brown mixed with grey and slightly tinged with rufous; tarsi black ringed with white. Fore wing dark glossy brown, the inner half rufous to end of cell; very faint traces of a sinuous antemedial line; orbicular and reniform minute, white ringed with black, the former round; an indistinct sinuous brown line from lower angle of cell to inner margin; terminal area slightly tinged with grey, the veins and interspaces streaked with black; cilia with a rather punctiform whitish line at base. Hind wing greyish wholly suffused with glossy brown; the underside whitish irrorated with brown.

Hab. Condo, Katanga distr. (Neave), 1 3 type. Exp. 22 mm.

1910.]

Corgatha hypoxantha, sp. n.

J. Head, thorax, and abdomen yellow strongly suffused with rufous: pectus, legs, and ventral surface of abdomen vellow. Fore wing vellow strongly suffused with rufous and irrorated with redbrown, the costa and terminal area tinged with grey-brown; antemedial line brown, waved; a blackish point in middle of cell; medial line brown, slightly sinuous; postmedial line brown excurved below costa, at middle and to inner margin, with white points on its outer edge at veins 7, 6, 4, 3, 1; subterminal line brown, excurved below vein 7 and at middle and slightly waved; a series of black points just before termen; a fine terminal red line; cilia with a red line at middle. Hind wing yellow suffused with rufous and irrorated with red-brown; an indistinct oblique brown antemedial line; postmedial line indistinct, brown, excurved at middle and with slight black and white points on its outer edge at veins 4, 3, 2; an indistinct waved brown subterminal line; a series of minute black points just before termen; a fine red terminal line; cilia pencilled with red. Underside of both wings yellow, the apex of fore wing irrorated with rufous.

Hab. N.E. RHODESIA, E. Luangwa distr. Petauke (Neare), 1 & type, Kalungwisi distr. (Neare), 1 & . Exp. 26 mm.

EUBLEMMA TRIGRAMMA, sp. n.

 σ . Head white tinged with rufous; tegulæ pale rufous; thorax and abdomen white tinged with brown; pectus, legs, and ventral surface of abdomen white tinged with palerufous. Fore wing creamy white suffused with brown leaving the costal area white to near apex, the termen bright rufous; antemedial line brown defined on inner side by white, very oblique, arising from below costa beyond middle; postnedial line creamy white, very oblique, arising from apex and crossing the slight punctiform dark subterminal line which is oblique below vein 4; cilia brown with white line at base except at tornus. Hind wing creamy white, the terminal half of inner margin and the termen suffused with brown and tinged with rufous; cilia white tinged with rufous at base; the underside creamy white, the apical area suffused with fiery red.

Hab. N.E. RHODESIA, E. Luangwa distr. (Neave); MASHONA-LAND, Umtali (Marshall), 1 3 type. Exp. 22 mm.

EUBLEMMA FEDOSA Guen. Noct. ii. p. 254 (1852).

N.E. RHODESIA, Chambezi valley.

THYATIRINA ACHATINA Weym. Berl. Ent. Zeit. 1896, p. 90. CONGO, S.E. Katanga; N.E. RHODESIA, E. Luangwa distr.

HICCODA DOSAROIDES MOORE, LEP. Atk. p. 135 (1882).

PORTUGUESE E. AFRICA, Chinde.

TARACHE ZELLERI Wilgrn. Anteckn. i Zool. i. p. 59 (1856). N.E. Rhodesia, upper Luangwa valley. TARACHE GRATIOSA Wllgrn. Anteckn. i Zool. i. p. 59 (1856).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley, Fort Jameson.

TARACHE NIPHOGONA Hmpsn. Trans. Zool. Soc. xix. p. 109, pl. 4. f. 17 (1909).

N.W. RHODESIA, Alala plateau.

TARACHE DISCOIDEA Hopff. Peters' Reise Mossamb. p. 433, pl. 28. f. 9 (1862).

N.E. RHODESIA, E. Luangwa distr.

EULOCASTRA ÆTHIOPS Dist. A. M. N. H. (7) i. p. 223 (1898).

Congo, Katanga, Kambove.

MIMASURA QUADRIPUNCTA, sp. n.

Head and tegulæ orange; thorax ochreous white; pectus, legs, and abdomen orange. Fore wing ochreous white, the costa narrowly orange; obliquely placed ante- and postmedial small black spots in submedian fold and on inner margin; cilia tinged with yellow. Hind wing pale yellow.

Hab. N.E. RHODESIA, Luangwa valley (*Neave*), $1 \leq 1 \notin$ type. *Exp.* ≤ 26 , $\notin 30$ mm.

MIMASURA INNOTATA, sp. n.

 \mathcal{S} . Head, thorax, and abdomen ochreous white slightly tinged with brown; palpi orange-yellow. Fore wing silky ochreous white, the costal edge yellow. Hind wing whitish suffused with fuscous brown. Underside of fore wing suffused with fuscous brown.

Hab. N.E. RHODESIA, E. Luangwa distr. (Neave), 1 5 type. Exp. 20 mm.

Hyposada hydrocampata Guen. Ur. & Phal. ii. p. 438 (1857).

N.E. RHODESIA, Luangwa R.

EUTELIANÆ.

EUTELIA OPERATRIX Wilgrn. Wien. Ent. Mon. iv. p. 170 (1860).

N.E. RHODESIA, E. Luangwa distr.

EUTELIA SYMPHONICA Hmpsn. Ann. S. Afr. Mus. ii. p. 309 (1902).

N.E. RHODESIA, Serenji distr., Petauke distr.

ЕUTELIA СУАНОLOPHA Hmpsn. A. M. N. H. (7) xvi. p. 384 (1905).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

EUTELIA POLYCHORDA Hmpsn. Ann. S. Afr. Mus. ii. p. 308 (1902).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley; N.W. RHODESIA, Alala plateau.

STICTOPTERINÆ.

STICTOPTERA PŒCILOSOMA Saalm. Ber. Senck. Ges. 1880, p. 276; id. Lep. Madag. p. 491, ff. 99, 100, 121, 124, 125.

GERM. E. AFRICA, Dar-es-Salaam.

STICTOPTERA LITIGIOSA Boisd. Faun. Ent. Madag. & Maur., Lép. p. 93, pl. 16. f. 3 (1833).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Chambezi valley.

STICTOFTERA METHVALEA Hmpsn, Ann. S. Afr. Mus. ii. p. 309 (1902).

Congo, Katanga, Kambove; N.E. Rhodesia, E. Luangwa distr., Bangweolo distr.

ACONTIANÆ.

PARAXESTIS IRRORATA, Sp. n. (Pl. XXXVI. fig. 10.)

 σ . Head and thorax whitish ochreous tinged with rufous and irrorated with fuscous; antennæ tinged with rufous; abdomen ochreous dorsally suffused with rufous. Fore wing whitish ochreous slightly tinged with rufous and irrorated with black; antemedial line very indistinct, angled outwards on median nervure; a black discoidal point; postmedial line very indistinct and oblique from costa to vein 6, then pale rufous, strongly incurved below vein 5; a faint diffused rather maculate subterminal blackish shade, excurved below costa; cilia blackish at tips. Hind wing yellowish white with slight rufous terminal line except towards tornus; the underside with the costal area white.

Hab. N.E. RHODESIA, Luangwa R. (Neave), 1 & type. Exp. 26 mm.

ARCYOPHORA LONGIVALVIS Guen. Noct. ii. p. 379, pl. 12. f. 9 (1852).

N.W. RHODESIA, Alala plateau.

ARCYOPHORA FUSCICONA, sp. n. (Pl. XXXVI. fig. 11.)

 \mathcal{S} . Head, thorax, and abdomen pale rufous; palpi black, white at tips; lower part of frons black with white spot; antennæ tinged with fuscous; pectus and legs greyer, the fore legs fuscous in front, the mid and hind tibiæ and tarsi irrorated with fuscous. Fore wing greyish suffused with rufous and slightly irrorated with fuscous; a conical black-brown patch on middle of costa;

a minute blackish point at lower angle of cell; a diffused fuscous subterminal shade, angled outwards below vein 7 and at middle. Hind wing silky ochreous suffused with reddish brown; cilia whitish at tips; the underside whitish irrorated with brown.

 $\ensuremath{\mathbb{Q}}$. Head, tho rax, and fore wing much greyer and with hardly any rufous tinge.

Hab. N.E. RHODESIA, E. LUANGWA distr. (*Neave*), 2 φ ; PORTUGUESE E. AFRICA, Chinde (*Neave*), 1 \Im type. *Exp.* 26 mm.

METACULASTA ENDOGLAUCA, sp. n. (Pl. XXXVI. fig. 20.)

J. Head and thorax grey mixed with white; abdomen ochreous white dorsally tinged with rufous. Fore wing yellowish white, the costal area suffused with rufous to beyond middle, the inner area, and the terminal area slightly, suffused with grey; the subcostal nervure defined by slight rufous streaks on basal half; a rufous streak below base of cell; a very oblique rufous striga from costa before middle to upper angle of cell and a slight oblique vellowish line from lower angle of cell to inner margin near base; postmedial line rufous and very oblique from costa to vein 6 below apex, where it is met by an oblique fuscous streak from apex, then oblique and somewhat dentate to inner margin before middle; the costal area towards apex with some dark irroration and the veins defined by slight dark streaks; a faint obliquely curved dark subterminal shade arising below apex; cilia brownish. Hind wing ochreous white, the termen tinged with brown.

Hab. N.E. RHODESIA, Chinsali distr. (Neare), 1 & type. Exp. 24 mm.

URBONA LACTEATA, sp. n. (Pl. XXXVI. fig. 21.)

Head, thorax, and abdomen creamy white, the palpi tinged with rufous behind, the antennæ tinged with fuscous. Fore wing creamy white irrorated with a few black-brown scales; a black discoidal point; postmedial line brown, arising very near apex, angled outwards below apex, then very oblique and slightly sinuous to middle of inner margin, some dark points on it towards apex; a slight oblique minutely waved brownish subterminal line somewhat excurved at middle; a terminal series of black striæ; cilia finely pencilled with brown. Hind wing ochreous white.

Hab. N.E. RHODESIA, N. Luangwa, Mt. Ulungu (Neare), 1 ♂, 1 ♀ type, Luangwa R., 1 ♂. Exp. 26 mm.

URBONA NIVEA Hmpsn. Ann. S. Afr. Mus. ii. p. 315 (1902). N.E. Rhodesia, Chambezi valley.

ACONTIA GRAELLSI Feisth. Ann. Soc. Ent. Fr. vi. p. 300, pl. 12. f. 3 (1837).

N.E. Rhodesia, Bangweolo distr.

EARIAS INSULANA Boisd. Faun. Ent. Madag. & Maur., Lép. p. 121, pl. 16. f. 9 (1833).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

ERIZADA ESMERALDA, Sp. n. (Pl. XXXVI. fig. 16.)

δ. Head and thorax pale emerald-green; pectus and legs white; abdomen brownish ochreous, ventrally whitish. Fore wing pale emerald-green; a subbasal black point on costa; antemedial line fine, white defined on outer side by a black striga from costa, slightly angled outwards below costa, then oblique; a minute black discoidal point; postmedial line fine, white, defined on inner side by a black striga from costa, slightly bent outwards below costa, then somewhat excurved and incurved below vein 4; the costa towards apex rufous with slight dark marks on it; traces of a minutely dentate dark subterminal line; cilia blackish at base, rufous at tips. Hind wing ochreous yellow with a diffused dark streak below extremity of vein 2; cilia white at tips except at apex; the underside with the apex tinged with rufous.

Hab. N.E. RHODESIA, E. Luangwa distr. (Neave), 1 & type. Exp. 22 mm.

WESTERMANNIA ŒDIPLAGA, sp. n. (Pl. XXXVI. fig. 27.)

Q. Head, thorax, and abdomen ochreous grey irrorated with brown; palpi with the second joint fuscous at sides; fore tibiae and the tarsi fuscous, the latter with slight pale rings. Fore wing ochreous grey irrorated with brown, the terminal area suffused with rufous except at tornus, the costal edge pale; a large chocolate-brown patch tinged with violaceous grey from costa beyond middle to submedian fold where it ends in a point, its inner edge incurved, its outer strongly excurved and bounded by the fine dark postmedial line slightly defined by whitish on outer side, angled inwards just above submedian fold and excurved to inner margin near tornus; traces of a punctiform dark subterminal line excurved below vein 7; cilia dark brown, white at tips. Hind wing pale suffused with reddish brown, the cilia brown with yellowish line at base and whitish tips; the underside yellowish irrorated with brown, a curved postmedial line.

Hab. N.E. RHODESIA, Luangwa R. (*Neave*), $1 \Leftrightarrow type$. *Exp.* 36 mm.

WESTERMANNIA ALBIGRISEA, sp. n. (Pl. XXXVI. fig. 26.)

Head white tinged with olive-yellow; thorax white, the fore legs brownish in front; abdomen white tinged with brown. Fore wing with the basal area white tinged with violaceous grey, the terminal half violaceous grey, the costal edge rufous; a rather diffused and somewhat inwardly oblique pale olive-yellow medial line with large quadrate silvery white patch beyond it from just below costa to vein 3, defined on outer side by a series of black striæ with some silvery scales on their outer side before the postmedial line, which is indistinct, somewhat excurved below costa and at middle, then bent inwards to near the medial line; traces of a maculate rufous subterminal line, somewhat angled outwards at vein 7 and excurved at middle; a terminal series of grey striæ slightly defined on inner side by white. Hind wing white suffused with brown especially on terminal area; cilia white; the underside white.

Hab. N.E. RHODESIA, Chambezi valley (Neave), 1 ♂, 1 ♀ type, L. Bangweolo, E. Luangwa distr. Exp. 24 mm.

WESTERMANNIA LUMINOSA Wlk. xv. 1759 (1858).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

CAREA THERMISTIS, sp. n. (Pl. XXXVI. fig. 17.)

J. Head, thorax, and abdomen rufous mixed with some fuscous. Fore wing pale rufous suffused with some brown on basal costal area, beyond the antemedial line on inner area, and between the postmedial and subterminal lines; antemedial line indistinct, brownish, minutely waved, bent outwards below the cell; a black point in end of cell and whitish discoidal lunule defined on inner side by black; postmedial line rather diffused, brown, oblique from costa to vein 4, angled inwards just above submedian fold and bent outwards to inner margin, a rather oblique diffused dark streak from it to termen below apex; a rather indistinct brown subterminal line, excurved at vein 7 and middle and ending on termen above tornus; a brown apical patch: cilia with some brownish spots. Hind wing yellowish white tinged with rufous, the termen fiery red; cilia whitish at tips; the underside whitish, the marginal areas suffused with fierv red.

Hab. N.E. RHODESIA, Luangwa R. (Neave), 1 & type. Exp. 32 mm.

CATOCALINÆ.

CYLIGRAMMA LATONA Cram. Pap. Exot. i. p. 20, pl. 13. f. B (1779).

Congo, Katanga, Kambove, Lualaba R.; N.W. Rhodesia, Kafue R.; N.E. Rhodesia, E. Luangwa distr., Petauke distr., Kalungwisi distr., Bangweolo distr.; Portuguese E. Africa, Makanga distr.

CYLIGRAMMA GOUDOTI Guen, Noct. iii. p. 189 (1852).

Congo, Katanga, Kambove.

CYLIGRAMMA FLUCTUOSA Drury, Ins. Exot. ii. p. 24, pl. 14. f. 1 (1770).

Congo, Katanga Kambove; N.W. Rhodesia, Alala plateau; N.E. Rhodesia, Chinsali distr., E. Luangwa distr.

CYLIGRAMMA LIMACINA Guér. Icon. R. Anim., Ins. pl. 89. f. 2 (1829),

Congo, Katanga, Kambove; N.E. RHODESIA, Lualaba R., Kalungwisi distr.

CYLIGRAMMA AMBLYOPS Mab. Bull. Soc. Ent. Fr. 1891, p. xc.

N.E. RHODESIA, Kalungwisi valley.

[Cyligramma amblyops Mab. This species and most of its allies are usually to be found only in deep shade in patches of dense forest. They have a clumsy flight and always settle on the ground. The abundant and ubiquitous C. latona Cram. is not thus limited to forest, but occurs everywhere and frequently comes to light.—S. A. N.]

CALLIODES APOLLINA Guen. Noct. iii. p. 193 (1852).

N.E. RHODESIA, upper Luangwa valley.

CALLIODES PRETIOSISSIMA Holl. Entom. xxv. Suppl. p. 94 (1892); id. Pr. U.S. Nat. Mus. xviii. p. 254, pl. 8. f. 2.

CONGO, Katanga, Kambove; N.W. RHODESIA, Kafue R.; N.E. RHODESIA, upper Luangwa valley, E. Luangwa distr., Bangweolo distr.

CALLIODES GLAUCESCENS Butl. P. Z. S. 1893, p. 680.

Congo, Katanga, Kambove; N.E. RHODESIA, Chambezi valley; PORTUGUESE E. AFRICA, Makanga distr.

SPIRAMA CAPENSIS Herr.-Schäff. Aussereur. Schmett. ff. 121, 122 (1850).

CONGO, Katanga, Kambove; N.E. RHODESIA, L. Bangweolo, Kalungwisi valley, E. Luangwa distr., Mansya R.

[Spirama capensis H.-Schäff. This species has a very curious habit of settling upon leaves, generally not far from the ground. Attached by the fore legs, it hangs loosely from a leaf with expanded wings, the secondaries covering and concealing the abdomen. In this position the insect looks exactly like a dead leaf attached by a cobweb or by damp to a living one. The dark line across both wings represents the midrib of the leaf, and the resemblance is enhanced by the insect resting with the long axis from tip to tip of the wings nearly vertical.-S. A. N.]

SPIRAMA RUFESCENS Kirby, A. M. N. H. (6) xviii. p. 391 (1896). N.E. RHODESIA, Luangwa R.

SPIRAMA AFRICANA Kirby, A. M. N. H. (6) xviii. p. 392 (1896).

N.E. RHODESIA, Luangwa valley.

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SPIRAMA PARDUS Guen, Noct. iii. p. 205 (1852).

N.E. RHODESIA, Luangwa valley, E. Luangwa distr., Tanganyika plateau.

AUDEA HUMERALIS Hmpsn. Ann. S. Afr. Mus. ii. p. 327 (1902). N.E. Rhodesia, Mpika.

DERMALEIPA PARALLEPIPEDA Guen. Noct. iii. p. 230 (1852).

N.E. RHODESIA, Bangweolo distr.

OPHIUSA KLUGI Boisd, Faun. Ent. Madag. & Maur., Lép. p. 103 (1833).

N.E. RHODESIA, E. Luangwa distr.

OPHIUSA XANTHOPTERA, sp. n. (Pl. XXXVI. fig. 22.)

Head and thorax orange; palpi and fore and mid tibiæ brown irrorated with white; tarsi brownish; abdomen pale vellow. Fore wing orange, the costal edge reddish brown; subbasal line represented by a red-brown point below costa and fuscous spot in cell; antemedial line red-brown, minutely waved, oblique to submedian fold, below which there is a fuscous spot before it; orbicular a dark point; reniform an elliptical rufous spot with some fuscous on its inner edge; a lunulate rufous medial line excurved beyond the cell, then incurved; postmedial line formed of rufous lunules, indistinctly double below vein 4, oblique from costa to vein 6, then inwardly oblique; an indistinct minutely waved rufous subterminal line with fuscous spot on it below vein 7; terminal area tinged with rufous except at apex; a series of black points just before termen. Hind wing orangevellow faintly tinged with rufous; a series of minute dark points just before termen; the underside suffused with rufous and white except on inner area; a black discoidal point, indistinct curved minutely waved postmedial line, and traces of medial and subterminal lines.

Ab. 1. Fore wing with the dark marks on basal area and the spot below vein 7 absent.

Hab. SIERRA LEONE, 1 \bigcirc ; N.W. RHODESIA, Alala plateau (*Neave*), 1 \bigcirc ; N.E. RHODESIA, Tanganyika plateau (*Neave*), 1 \bigcirc type. *Exp.* 66 mm.

OPHIUSA ALBITERMIA, sp. n. (Pl. XXXVII. fig. 21.)

Head, thorax, and abdomen pale yellow, the last slightly irrorated dorsally with fuscous; palpi, pectus, legs, and ventral surface of abdomen slightly tinged with brown. Fore wing pale yellow slightly irrorated with fuscous, the terminal area whitish, tinged with brown at apex; subbasal line represented by slight dark striæ below costa and cell; antemedial line indistinct, dark, oblique, waved; a dark point in middle of cell and two slight discoidal points; medial line indistinct, double, dark, excurved beyond the cell, then incurved and waved; postmedial line dark, crenulate, slightly curved; subterminal line blackish, oblique from below apex to discal fold, then erect, a brownish tinge beyond it. Hind wing pale yellow, obliquely curved; antemedial and medial lines sometimes present; a postmedial fuscous mark below costa with line from it to tornus; a blackish apical patch with diffused line from it to tornus, the area beyond it whitish; the underside white irrorated with brown, a black discoidal point, indistinct medial and postmedial lines and minutely waved whitish subterminal line incurved below costa.

Hab. N.E. Rhodesia, E. Luangwa distr. (Neave), 2 ♂, 1 ♀ type. Exp. 54 mm.

OPHIUSA GONOPTERA, sp. n. (Pl. XXXVII. fig. 13.)

3. Head and thorax pale olive-brown; palpi blackish irrorated with grey; antennæ, tibiæ, and tarsi fuscous; abdomen pale brown. Fore wing grey-brown suffused with brown and irrorated with black; antemedial line very indistinct, blackish, oblique, strongly angled outwards in submedian fold; a black point in middle of cell; reniform indistinct, brown, defined by white points above on outer side and below on inner and outer sides; postmedial line very indistinct, waved, excurved below costa, then oblique, a paler patch before it in submedian interspace: subterminal line represented by a grey striga from costa, a dentate black mark defined on outer side by grey below apex, then by an incurved series of slight black points and by a faint olive-yellow spot above tornus, an oblique dark striga beyond it from apex; traces of a series of black points before termen and of some black points on termen. Hind wing grey-brown with broad diffused fuscous subterminal shade; cilia whitish from below apex to the lobe. Underside brownish grey; fore wing with slight discoidal lunule, the terminal area broadly suffused with fuscous. Hind wing with the termen lobed at middle.

Hab. N.E. RHODESIA, Luangwa R. (Neare), 1 & type. Exp. 58 mm.

OPHIUSA TUMIDITERMINA, sp. n. (Pl. XXXVII. fig. 22.)

 \mathcal{S} . Head and thorax pale olive-yellow; palpi, tibiæ, and tarsi fuscous irrorated with grey; abdomen pale brownish grey. Fore wing pale olive-yellow slightly irrorated with dark brown; ante-medial line brown, indistinct, obsolete towards costa, angled inwards on median nervure and outwards in submedian fold; a black point in middle of cell; reniform pale red-brown defined by some black scales and with white points on its outer side above and on inner and outer sides below; postmedial line brown, obsolete at costa, then oblique sinuous; subterminal line represented by two black-brown lunules below costa defined on outer side by grey and brown, then by an incurved series of grey and brown points on the veins and by two grey spots defined by

[Mar. 1,

brown above tornus, the lower one large; a crenulate brown line just before termen with grey points at the veins; cilia grey, brown at base and tips. Hind wing pale reddish brown with broad diffused fuscous subterminal shade; some grey on termen at the lobe; cilia white, fuscous at the lobe. Underside brownish white; fore wing with broad fuscous subterminal shade not reaching inner margin; hind wing with fuscous apical patch.

Q. Head, thorax, and fore wing pale red-brown ; underside of hind wing with faint diffused fuscous subterminal shade. Hind wing of male with the termen lobed at middle.

Hab. N.E. RHODESIA, Tanganyika plateau (*Neave*), $1 \triangleleft$ type, Chambezi valley (*Neave*), $1 \heartsuit$, Lake Bangweolo (*Neave*), $1 \heartsuit$, Mansya R., $1 \heartsuit$. *Exp.* 58 mm.

OPHIUSA TIRRHACA Cram. Pap. Exot. ii. pl. 172. f. E (1779). N.E. RHODESIA, E. Luangwa distr.

OPHIUSA TETTENSIS Hopff. Mon. Konigl. Akad. Wissen. 1857, p. 422; id. Peters' Reise Moz., Ins. p. 436, pl. xxviii. f. 12.

N.E. RHODESIA, Luangwa valley.

OPHIUSA DAVID Holl. Psyche, vii. p. 70 (1894).

N.E. RHODESIA, Kalungwisi distr.

[°] Ophiusa finifascia Wlk. xv. 1676 (1858).

N.E. RHODESIA, E. Luangwa distr.

Ophiusa mejanesi Guen. Noct. iii. p. 232 (1852).

Congo, Katanga, Kambove; N.E. RHODESIA, upper Luangwa valley, E. Luangwa distr.

OPHIUSA CANCELLATA Saalm. Lep. Madag. p. 414, f. 186 (1891). N.E. RHODESIA, Luangwa R., E. Luangwa distr.

OPHIUSA FABER Holl. Psyche, vii. p. 69 (1894). N.E. Rhodesia, upper Luangwa valley.

OPHIUSA BOVIS Gever, Zütr. Ex. Schmett. ff. 793-4 (1827).

CONGO, Katanga, Kambove; N.E. RHODESIA, E. Luangwa distr., Luangwa R., Chambezi valley, Chinsali distr., Bangweolo distr.

Ophiusa mormoides Wlk. xiv. 1393 (1858).

N.E. RHODESIA, LUANGWA R.

OPHIUSA LIENARDI Boisd. Faun. Ent. Madag. & Maur., Lép. p. 102, pl. 15. f. 5 (1833).

Congo, Katanga, Kambove; N.E. Rhodesia, Lake Bangweolo, Mansya R.

OPHIUSA CATELLA Guen. Noct. iii. p. 247 (1852).

N.W. RHODESIA, Alala plateau, Kafue R.; N.E. RHODESIA, Serenji distr., Bangweolo distr.

OPHIUSA PORPHYRESCENS, sp. n. (Pl. XXXVII. fig. 14.)

Head and thorax brown mixed with purplish grey; abdomen grey suffused with fuscous brown. Fore wing brown suffused with purplish grey and with dark patches on costal area before the postmedial and subterminal lines; antemedial line brown slightly defined on each side by whitish, angled outwards below costa, then oblique; a blackish discoidal line defined on inner side by whitish; an indistinct dark medial line excurved beyond the cell, then sinuous; postmedial line dark defined on outer side by whitish, angled outwards at vein 6, oblique to vein 2, then erect, two white points beyond it on costa; subterminal line indistinct, pale faintly defined on outer side by fuscous, angled outwards at vein 7, then minutely waved and bent outwards to tornus; a series of black points just before tornus; a fine dark terminal line and pale line at base of cilia. Hind wing fuscous brown, the termen tinged with grey: a fine dark terminal line with black points at the interspaces and pale line at base of cilia; the underside whitish suffused and irrorated with brown except on inner area, traces of a dark postmedial line excurved below costa, then oblique, and of a double waved subterminal line.

Hab. N.E. RHODESIA, Chambezi vallev (Neave), 2 3, 1 9 type. Exp. 44 mm.

Ophiusa proxima Hmpsn. Ann. S. Afr. Mus. ii. p. 339 (1902).

Congo, Katanga, Kambove: N.E. RHODESIA, Luangwa R., E. Luangwa distr., Lake Bangweolo, Tanganyika plateau, Mansya R.

OPHIUSA PALPALIS Wlk. XXXIII. 968 (1865).

N.E. RHODESIA, E. Luangwa distr., Luangwa R., Chambezi valley.

Ophiusa Algira Linn. Syst. Nat. ed. xii. p. 836 (1766).

Congo, Katanga, Kambove; N.E. RHODESIA, E. Luangwa distr., Chambezi valley, Mansya R., Bangweolo distr.

Ophiusa derogans Wlk. xv. 1832 (1858).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, Tanganyika plateau.

OPHIUSA ERECTATA Hmpsn. Ann. S. Afr. Mus. ii. p. 341 (1902).

N.E. RHODESIA, Luangwa R., Kalungwisi valley.

Ophiusa Abnegans Wlk. xv. 1831 (1858).

N.E. RHODESIA, Luangwa R., Kalungwisi valley.

OPHIUSA ANGULARIS Boisd. Faun. Ent. Madag. & Maur., Lép. p. 103, pl. 13. f. 2 (1833).

N.E. RHODESIA, E. Luangwa distr.

OPHIUSA MESONEPHELE, sp. n. (Pl. XXXVII. fig. 23.)

 \mathcal{Q} . Head, thorax, and abdomen brown tinged with purplish grey; palpi white at extreme tips; tarsi ringed with whitish. Fore wing brown suffused with purple-grey; antemedial line black, rather diffused on inner side, straight, erect; postmedial line with band of black suffusion before it, excurved at discal and submedian folds, some pale points beyond it on costa; two obliquely placed dentate subapical black spots with traces of a waved line. Hind wing grey-brown with fine waved dark terminal line. Hind wing grey-brown with slight dark irroration and traces of a curved postmedial line.

Hab. N.E. RHODESIA, Chambezi valley (*Neare*), $2 \Leftrightarrow$ type, Mansya R. (*Neare*), $1 \Leftrightarrow$. *Exp.* 36 mm.

OPHIUSA GONIOPHORA, sp. n. (Pl. XXXVII. fig. 15.)

d. Head and thorax ochreous grey mixed with black; pectus ochreous white; tarsi fuscous with pale rings; abdomen dorsally fuscous, ventrally ochreous white. Fore wing grey-brown with a purplish tinge, the basal half irrorated with black, the area between the medial and postmedial lines suffused with blackbrown becoming velvety black at the postmedial line; traces of a fuscous sinuous subbasal line from costa to vein 1; antemedial line indistinctly double, blackish, sinuous; medial line diffused, fuscous, inwardly oblique; postmedial line very acutely angled outwards at vein 6, then strongly incurved and excurved between veins 3 and 2, its angle met by an oblique sinuous streak from apex, the enclosed costal area tinged with rufous and with some pale points on costa; a series of black points just before termen; cilia with a fine pale line at base. Hind wing fuscous brown ; the underside greyish suffused and irrorated with fuscous, a black discoidal point and two indistinct postmedial lines excurved below costa.

Hab. Congo, Katanga, Kambove (Neave), 1 & type. Exp. 52 mm.

Genus CTENUSA, nov.

Type, C. carnicolor Hmpsn.

Proboscis fully developed: palpi upturned, the 2nd joint reaching vertex of head and moderately fringed with hair in front, the 3rd moderate, oblique; frons smooth; eyes large, round; antennæ of male bipectinate with moderate branches, the apex simple; thorax clothed with hair only and without crests; tibiæ moderately fringed with hair, the mid and hind tibiæ strongly spined; abdomen without crests. Fore wing broad, the apex rectangular, the termen evenly curved, crenulate; veins 3 and 5 1910.]

from near angle of cell; 6 from upper angle; 9 from 10 anastomosing with 8 to form the areole; 11 from cell. Hind wing with the termen produced to a slight lobe at vein 4; the cell nearly half the length of wing; veins 3, 4 from angle; 5 from just above angle; 6, 7 from upper angle; 8 anastomosing with the cell near base only.

CTENUSA PALLIDA Hmpsn. Ann. S. Afr. Mus. ii. p. 321 (1902). N.E. Rhodesia, Kalungwisi distr.

CTENUSA RUFIRENA, sp. n. (Pl. XXXVII. fig. 12.)

 \mathcal{Q} . Head fiery red, the vertex and tegulæ chocolate-brown; palpi with dark line at sides; thorax and abdomen yellow tinged with rufous, the pectus in front and fringes of hair on fore legs fiery red, the fore tibiæ and tarsi fuscous in front, the former irrorated with white. Fore wing yellow tinged with rufous and irrorated with fuscons; antemedial line indistinct, red slightly defined on inner side by yellow, curved; reniform rufous defined by yellow, an oblique red striga above it from costa; postmedial line red slightly defined on outer side by yellow and with dark striga from costa, excurved below costa, then waved; subterminal line yellow, almost straight; a series of slight red points before termen; cilia red with fine yellow lines at base and middle. Hind wing yellow tinged with rufous and irrorated with fuscous, the costal area whitish to beyond middle; a minutely waved fuscous postmedial line; a faint broad fuscous subterminal shade; cilia with fine yellow lines at base and middle. Underside of fore wing with blackish discoidal striga, hind wing with point, both wings with fuscous subterminal shade.

Hab. N.W. RHODESIA, Alala plateau, Ndola distr. (*Neave*), $1 \Leftrightarrow type$. *Exp.* 54 mm.

GRAMMODES GEOMETRICA Fabr. Syst. Ent. p. 599 (1775).

Congo, Katanga, Kambove; N.W. RHODESIA, Alala plateau; N.E. RHODESIA, Kalungwisi valley, Chambezi valley, Luangwa valley, E. Luangwa distr., Chinsali distr., Bangweolo distr.

GRAMMODES STOLIDA Fabr. Syst. Ent. p. 599 (1775).

PORTUGUESE E. AFRICA, Chinde.

GRAMMODES EUCLIDICOLA Wlk. xiv. 1438 (1858).

Congo, Katanga, Kambove.

GRAMMODES BENITENSIS Holl. Psyche, vii. p. 85. pl. ii. f. 25 (1894).

N.E. RHODESIA, Kalungwisi distr., Mansya R.

GRAMMODES DELTA Boisd. Faun. Ent. Madag. & Maur., Lép. p. 105, pl. 13. f. 1 (1883).

N.E. RHODESIA, E. Luangwa distr., Chambezi valley.

CHALCIOPE HYPPASIA Cram. Pap. Exot. iii. pl. 250. f. E (1779).

Congo, Kambove, Katanga; N.E. Rhodesia, E. Luangwa distr., Lake Bangweolo distr., Kalungwisi valley.

CHALCIOPE DITRIGONA, sp. n. (Pl. XXXVII. fig. 5.)

Head, thorax, and abdomen brownish ochreous mixed with some fuscous. Fore wing greyish ochreous tinged with redbrown and invorated with fuscous; a velvety black triangular mark defined by silvery white, its angles on vein 1 near base and beyond middle and its apex on median nervure; another velvety black triangular patch defined by silvery white on postmedial area, its angles on discocellulars, at vein 7 below apex and above vein 1 towards tornus; two brown subterminal lines bent outwards to apex: a terminal series of black points; cilia whitish with a fuscous line near base. Hind wing grey suffused with brown; a fuscous subterminal shade from apex to vein 2; a terminal series of black points; cilia whitish with a fuscous line from apex to vein 2; the underside white tinged with brown and invorated with fuscous except on inner area, a faint curved pale postmedial shade from costa to vein 2.

Hab. N.E. RHODESIA, E. Luangwa distr., Petauke (Neave), 1 &, 1 & type. Exp. 42 mm.

CHALCIOPE ALBIFISSA, sp. n. (Pl. XXXVII. fig. 6.)

Q. Head, thorax, and abdomen grey-brown. Fore wing greyish ochreous suffused with red-brown; a velvety black triangular patch, its angles on median nervure near base and lower angle of cell and on vein 1 near tornus, divided by an oblique white streak from another velvety black triangular mark on postmedial area, defined on outer side by white, its angles on discocellulars, on vein 7 below apex and submedian fold above tornus: a fuscous subterminal line diffused on outer side and bent outwards to apex; a fine waved black terminal line; cilia white at tips. Hind wing grey-brown; a fine black terminal line; cilia white at tips; the underside grey suffused with reddish brown.

Hab. N.W. RHODESIA, Alala plateau, Mkushi distr. (Neave), 1 Q type; N.E. RHODESIA, Bangweolo distr. (Neave), 2 S. Exp. 40 mm.

CHALCIOPE MICROGONIA, sp. n. (Pl. XXXVII. fig. 24.)

Q. Head, thorax, and abdomen grey-brown. Fore wing greybrown irrorated with fuscous; a triangular velvety black patch in submedian interspace from near base to middle, its outer edge obliquely excised and slightly defined by white; a blackish point in end of cell; a triangular velvety black patch on postmedial area defined on inner and outer sides by whitish, its angles on discocellulars and vein 6 and its apex below vein 2, followed by a rufous band from vein 6 to above inner margin, met at vein 6 by an oblique diffused black fascia from apex, its outer edge then defined by small dentate black marks, the mark above inner margin diffused to tornus; a fine blackish terminal line. Hind wing grey-brown with a broad diffused fuscous subterminal shade; a fine black terminal line; the underside grey-brown tinged with fuscous.

Hab. N.E. RHODESIA, E. Luangwa distr., Petauke (Neave), $1 \ \varphi$ type. Exp. 44 mm.

ATTATHA ETHIOPICA, sp. n. (Pl. XXXVIII. fig. 17.)

Head orange, the frons with black bands at middle and above; palpi with some black above; antennæ blackish; thorax yellow, the tegulæ at tips, the meso- and metathorax with velvety black bands; pectus in front and fore legs orange; abdomen orange above, yellow below. Fore wing ochreous yellow tinged with rufous towards tornus; a triangular velvety black patch in and below base of cell, its outer edge somewhat excised and its lower extremity rather produced; a black fascia on inner margin from near base to beyond middle, its extremities acute; a triangular velvety black patch from middle of costa, its outer edge produced to a point between veins 4, 3 and its lower extremity produced to a long oblique fascia where it is somewhat dilated and squarely truncate: a triangular velvety black patch from costa before apex, its lower extremity obliquely produced to a point near termen below vein 3, rather lobed on outer side, a fine oblique brown line before the patch from vein 7 to below vein 3; a fine black terminal line from apex to vein 4, followed by small spots at veins 4, 3, 2; a few black scales at tornus; cilia black at tips between veins 4 and 2. Hind wing orange-yellow with narrow black band or series of small spots between apex and vein 3, sometimes followed by some points towards tornus; the underside yellow with more or less complete series of small black spots just before termen.

Hab. Congo, Katanga, Kambove (Neave), 1 \Im ; N.E. Rhodesia, E. Luangwa distr., Mterize R. (Neave), 4 \Im , 6 \Im type; Mozambique, Gorongoza. Exp. 44 mm.

Colbusa Euclidica Wlk. xxxiii. 978 (1865).

N.E. RHODESIA, E. Luangwa distr.

REMIGIA REPANDA Fabr. Ent. Syst. iii. 2. p. 49 (1792).

Congo, Katanga, Kambove; N.E. Rhodesia, E. Luangwa distr., Luangwa valley, Chambezi valley, Chinsali distr., Lake Bangweolo, Kalungwisi distr., Mansya R., Mpika.

REMIGIA FRUGALIS Fabr. Syst. Ent. vi. p. 601 (1775).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Chambezi valley, Bangweolo distr.

REMIGIA PERSINUOSA, sp. n. (Pl. XXXVII. fig. 16.)

 σ . Head and thorax brownish grey with a few fuscous scales; palpi with the 2nd joint blackish at sides; fore and mid tibiæ

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and tarsi blackish, the tarsi with pale rings; abdomen brownish grey slightly irrorated with black and dorsally tinged with fuscous except at base. Fore wing brownish grey slightly irrorated with black; a black discoidal point; postmedial line slight, black, outwardly oblique from below costs to vein 6, then inwardly oblique, slightly excurved from vein 5 to below 3, then incurved to below middle of cell, then stronger and angled outwards at vein 1, then bent upwards to submedian fold before middle where it terminates in a minute angle; an oblique rather diffused black streak from apex to vein 4 just beyond postmedial line, with two small obscure black spots on it below apex; a subterminal series of slight black marks from below apex to submedian fold where the mark is further from termen; a terminal series of black points. Hind wing greyish tinged with brown; traces of an oblique fuscous postmedial line; a large fuscous apical patch and faint subterminal shade; a terminal series of black points except towards tornus. Underside of both wings with small discoidal blackish spot, obliquely curved diffused postmedial line except on inner area; fore wing with subterminal shade expanding into a patch below middle; hind wing with faint subterminal shade.

 \mathcal{Q} . Fore wing with the markings obsolescent.

Hab. Congo, Katanga, Kambove (*Neave*), 2 ♂ type; N.W. RHODESIA, Kapopo (*Neave*), 1 ♀. *Exp.* 48 mm.

REMIGIA UNDATA Fabr. Syst. Ent. vi. p. 600 (1775).

Congo, Katanga, Kambove; N.W. Rhodesia, Kapopo; N.E. Rhodesia, E. Luangwa distr., Luangwa valley, Chambezi valley, Chinsali distr., Kalungwisi valley, Lake Bangweolo, Tanganyika plateau.

REMIGIA MUTUARIA Wlk. xiv. 1506 (1858).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Chambezi valley, Chinsali distr., Kalungwisi valley, Lake Bangweolo, Tanganyika plateau, Fort Jameson.

REMIGIA JUDICANS Wlk. xv. 1831 (1858).

Congo, Katanga, Kambove; N.E. RHODESIA, Serenji distr., E. Luangwa distr., N. Luangwa, Mt. Ulungu, Chambezi valley, Kalungwisi valley, Lake Bangweolo; Portuguese E. Africa, S. Angoniland.

REMIGIA HETEROCHROA, sp. n. (Pl. XXXVII. fig. 1.)

Head and thorax olive-grey mixed with brown; palpi blackish irrorated with grey; pectus and legs greyer, the tarsi fuscous with pale rings; abdomen grey-brown. Fore wing olive greybrown irrorated with fuscous; antemedial line blackish, slightly angled outwards below costa, then erect and almost straight; a slight brown discoidal striga; postmedial line indistinctly double, blackish with small black spot at costa, very minutely waved, excurved to vein 4, then erect; subterminal line brown, straight, 1910.7

bent outwards to apex and with three black points on it below apex; a crenulate terminal line; cilia fuscous. Hind wing fuscous brown; traces of a nearly straight postmedial line; subterminal line greyish slightly defined on each side by brown, from vein 4 to tornus: a fine waved dark terminal line; the underside grey thickly irrorated with brown and with traces of a curved postmedial line.

Ab. 1. Head, thorax, and fore wing much more rufous and without any olive-brown tinge or dark irroration, the outer postmedial line with white points on it except towards costa.

Ab. 2. Head, thorax, abdomen, and fore wing much darker and tinged with purplish grey, the last with two small black discoidal spots.

Hab. N.W. RHODESIA, Alala plateau (*Neave*), 3σ , 3φ type; N.E. RHODESIA, E. Luangwa distr., 3φ , Luangwa R., 1φ , Chambezi valley, 1σ , Chinsali distr. (*Neave*), 1σ , 1φ . *Exp.* σ 34, φ 38 mm.

REMIGIA GRISEICILIA, sp. n. (Pl. XXXVII. fig. 2.)

 σ . Head and thorax grey suffused with rufous; palpi blackish invorated with white; pectus and legs greyer, the tarsi fuscous ringed with white; abdomen pale reddish brown invorated with fuscous, ventrally greyer. Fore wing pale greyish rufous slightly invorated with brown, the terminal area deeper rufous; antemedial line indistinct, brown, slightly sinuous; a slight brown discoidal lunule; postmedial line slight, brown with series of black points on it, oblique to vein 6 and below vein 4; subterminal line very indistinct, greyish with slight dark streak on its outer side, bent outwards to apex, then almost straight; a waved brown terminal line; cilia grey-white with dark lines at middle and tips. Hind wing fuscous brown, the terminal area darker, a faint pale postmedial shade; a fine waved dark terminal line; cilia grey, tinged with brown at base; the underside brownish ochreous irrorated with fuscous, the terminal area suffused with fuscous.

 \mathcal{Q} . Head, thorax, and fore wing cupreous red.

Hab. N.W. RHODESIA, Alala plateau, Mkushi distr. (*Neave*), $2 \ge 4$, $4 \ge$ type. *Exp.* 42 mm.

REMIGIA MOLYBDOPASTA, sp. n. (Pl. XXXVII. fig. 3.)

 \bigcirc . Head and thorax brown suffused with fuscous; palpi at base, pectus and legs whitish, the tarsi black ringed with white; abdomen red-brown, ventrally whitish. Fore wing fuscous brown suffused with silvery blue especially on costal area to beyond middle, the postmedial area pale reddish brown, whitish at costa; a sinuous black subbasal line from costa to submedian fold; antemedial line black, expanding into a bar at costa, obliquely excurved and slightly sinuous; a faint blackish discoidal lunule; postmedial line black, expanding into a spot at costa, slightly incurved below vein 3; a faint dark subterminal shade towards costa; cilia with some grey at base. Hind wing pale rufous, the basal area tinged

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with brown, the terminal area suffused with brown; an oblique brown medial line; an oblique rufous subterminal bar from vein 4 to 1; the underside ochreous yellow, a blackish discoidal point, faint oblique postmedial line with some dark points on it, the terminal area suffused with fuscous narrowing to a point at vein 1.

Ab. 1. Fore wing wholly suffused with silvery blue, the postmedial area hardly paler; hind wing darker.

Hab. N.W. RHODESIA, Alala plateau, Udola distr. (Neave), $2 \ \varphi$ type. Exp. 40 mm.

REMIGIA MODERATA Wilgrn, Wien, Ent. Mon. iv. p. 174 (1860).

N.W. RHODESIA, Alala plateau, Kafue R.; N.E. RHODESIA, Luangwa R., Bangweolo distr.

EGYBOLIS VAILLANTINA Stoll, Suppl. Cram. pl. 31. f. 3 (1790). Portuguese E. Africa, Chinde.

PLUSIANÆ.

PLUSIA CHALCYTES Esp. Schmett. pl. 141. f. 3 (1789).

Congo, Katanga, Kambove; N.W. RHODESIA, Alala plateau, Kapopo; N.E. RHODESIA, Serenji distr., E. Luangwa distr., Luangwa R., Bangweolo distr., Mansya R., Mpika.

PLUSIA FURCIFERA Wlk. xii. 927 (1857).

N.E. RHODESIA, E. Luangwa distr.

PLUSIA ORICHALCIA Fabr. Spec. Ins. ii. 227 (1781).

N.E. RHODESIA, Serenji distr.

Noctuinæ.

RHANIDOPHORA CINCTIGUTTA Wlk. Trans. Ent. Soc. (3) i. p. 77 (1862).

Congo, Katanga, Kambove; N.E. RHODESIA, Kalungwisi valley, Chambezi valley, Chinsali distr., Bangweolo distr.

RHANIDOPHORA RIDENS Hmpsn. Ann. S. Afr. Mus. ii. p. 370 (1902).

Congo, Katanga, Kambove; N.E. Rhodesia, Serenji distr., E. Luangwa distr.

CALESIA SAMBESITA Wlk. XXXIII. 962 (1865).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley; PORTUGUESE E. AFRICA, Makanga distr., S. Angoniland.

CALESIA ARHODA, sp. n. (Pl. XXXVII. fig. 4.)

 \mathcal{J} . Head, thorax, and abdomen dark purplish brown mixed with some grey, the palpi, frons, and anal tuft tinged with

ochreous; tarsi with pale rings. Fore wing dark purplish brown irrorated with grey; antemedial and medial lines indistinct, dark, waved; an ochreous white discoidal point; postmedial line indistinct, dark slightly defined on outer side by grey, angled outwards below costa and at middle, then oblique, sinuous; subterminal line indistinct, dark, waved, excurved at middle; an indistinct sinuous dark terminal line. Hind wing dark purplish brown tinged with grey; traces of curved waved dark medial, postmedial, and subterminal lines; an indistinct dark terminal line; the underside greyer with indistinct waved dark medial, postmedial, and subterminal lines.

Hab. N.E. RHODESIA, E. Luangwa distr., Petauke (Neave), 1 5 type. Exp. 36 mm.

CALESIA SOBRINA Möschl. Abh. Senck. Ges. xv. p. 91, pl. f. 13 (1887).

Congo, Katanga, Kambove.

SPEIREDONIA PLICATA, sp. n. (Pl. XXXVII. fig. 25.)

Fore wing of male with depressed groove in discal fold from before middle to near termen; veins 4, 5 depressed at base.

d. Head and thorax dark reddish brown; abdomen fuscous brown; palpi in front, pectus, legs, and ventral surface of abdomen greyer. Fore wing greyish brown irrorated and suffused in parts with fuscous; subbasal line indistinct, blackish, from costa to submedian fold; antemedial line indistinctly double, strongly incurved below the cell and excurved above inner margin; a rather diffused medial line, expanding into an obscure annulus below the cell; reniform with faint pale annulus somewhat concave on inner side and displaced towards costa above the fold; postmedial line double, blackish filled in with grevish, waved, excurved from costa to vein 3, then incurved, some pale points beyond it on costa; subterminal line grevish defined on inner side by black suffusion, somewhat dentate, angled outwards at vein 7; a series of small black and whitish spots just before termen; cilia fuscous with a fine pale line at Hind wing greyish brown; an indistinct sinuous dark base. antemedial line; medial line double, blackish filled in with grey, minutely waved, sinuous; postmedial line double, the inner line strong, blackish, minutely waved, sinuous; a series of small black and whitish spots just before termen; a fine pale line at base of cilia: the underside grey-brown with the lines indistinct and more even.

Q. Darker; fore wing with indistinct discoidal bar, the obscure annulus at lower angle of cell.

Hab. Congo, Katanga, Kambove (Neave), 1 ♀; N.E. RHODESIA, N. Luangwa, Mt. Ulungu (Neave), 7 ♂, 9 ♀ type; PONDOLAND (Swinny), 1 ♀. Exp. 48-56 mm.

SPEIREDONIA PRUNICOLORA, sp. n. (Pl. XXXVII. fig. 7.)

Femora and tibiæ of male with fringes of long hair, the mid tibiæ greatly dilated and with thick fringes of hair and scales.

Head and thorax black brown irrorated with grey, the hinder part of thorax with a purplish gloss; palpi streaked with black and ochreous; pectus and legs ochreous white mixed with some brown; abdomen fuscous brown with paler bands on basal segments, the crests with golden metallic scales, the terminal segments tinged with purple. Fore wing black-brown suffused with brilliant purple, slightly on terminal area, and irrorated with some whitish scales; subbasal line black defined by rufous, waved, from costa to submedian fold; antemedial line black defined on each side by rufous, waved; medial area with a rufous streak below costa; reniform rufous, its centre defined by black, white points at its upper and lower extremities and a rufous streak from it to postmedial line; a sinuous black medial line closely approximated below the cell to the postmedial line, which is black slightly defined on each side by rufous and at costa by ochreous white, oblique to vein 6, then sinuous, at vein 3 bent unwards to lower edge of reniform, some whitish points beyond it on costa; subterminal line ochreous white towards costa, then grey defined on each side by black suffusion, slightly angled inwards below costa and excurved below vein 7 and at middle; a series of black and ochreous white spots just before termen; a fine ochreous white line at base of cilia. Hind wing dark brown with some purple suffusion from origin of vein 2 to termen and along terminal half of vein 1; two sinuous black postmedial lines; subterminal line grey defined on each side by black suffusion, waved; a series of black and ochreous white striæ just before termen; a fine ochreous white line at base of cilia; the underside whitish tinged with brown except on inner area, a slight discoidal bar, two crenulate black postmedial lines, a dentate grey subterminal line defined on each side by fuscous, and a series of black lunules before termen defined on outer side by ochreous white.

Hab. SIERRA LEONE (*Dudgeon*), 1 \mathcal{S} type; ASHANTI, Obuasi (*Bergman*), 1 \mathcal{S} ; N.E. RHODESIA, Chambezi valley (*Neave*), 1 \mathcal{Q} . Exp. 40-44 mm.

ARGADESA MATERNA Linn. Syst. Nat. ed. xii. 2. p. 840 (1766).

Congo, Katanga, Kambove; N.E. RHODESIA, E. Luangwa R., Bangweolo distr; Portuguese E. Africa, S. Angoniland.

HALASTUS DIVITIOSA Wlk. Tr. N. H. Glasg. i. p. 356, pl. vii. f. 11 (1873).

Congo, Lualaba R.; N.E. RHODESIA, Chambezi valley, Kalungwisi distr.

SPHINGOMORPHA CHLOREA Cram, Pap. Exot. ii. pl. 104. f. C. (1779).

Congo, Katanga, Kambove; N.E. RHODESIA, E. Luangwa

distr., Serenji distr., Kalungwisi valley, Bangweolo distr.; Portuguese E. Africa, Chinde.

PANDESMA JUBRA Swinh. P. Z. S. 1889, p. 413, pl. 44, f. 4. Congo, Katanga, Kambove.

ERICEIA INANGULATA Guen. Noct. iii. p. 210 (1852).

N.W. RHODESIA, Kafue R.; N.E. RHODESIA, E. LUANGWA distr., LUANGWA R., Chinsali distr., Mansya R.; PORTUGUESE E. AFRICA, S. Angoniland.

POLYDESMA COLLUTRIX Geyer, Zütr. v. p. 22, ff. 885-6 (1837).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Fort Jameson.

HYPOCALA DEFLORATA Fabr. Ent. Syst. iii. p. 472 (1792).

Congo, S.E. Katanga; N.E. Rhodesia, Serenji distr.; Pontuguese E. Africa, S. Angoniland.

CALPE EMARGINATA Fabr. Ent. Syst. iii. 2. p. 82 (1792).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

Plusiodonta commoda Wlk. xxxiii. 844 (1865).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Chambezi valley.

Cosmophila Erosa Hübn. Zütr. Samml. Exot. Schmett. ii. p. 19, ff. 287-8 (1827).

Congo, Katanga, Kambove; N.W. RHODESIA, Kapopo; N.E. RHODESIA, E. Luangwa distr., Luangwa R., Chambezi valley, Chinsali distr., Bangweolo distr., Mansya R., Mpika.

Cosmophila sabulifera Guen. Noct. ii. p. 404 (1852).

N.W. RHODESIA, Kapopo; PORTUGUESE E. AFRICA, Chinde.

Cosmophila LUPERCA Möschl. Verh. zool.-bot. Ges. Wien, xxxiii. p. 300, pl. xvi. f. 15 (1883).

N.E. RHODESIA, E. Luangwa distr.

COSMOPHILA BIDENTATA, sp. n. (Pl. XXXVII. fig. 11.)

 \mathcal{S} . Head and thorax bright rufous slightly mixed with greyish; abdomen grey slightly tinged with rufous; pectus, legs, and ventral surface of abdomen whitish. Fore wing ochreous greyish suffused with rufous, the terminal area deep rufous; a small grey patch at base of inner margin; antemedial line deep rufous, oblique, sinuous; orbicular a white point ringed with rufous; reniform rufous with slight white points at the angles of cell; postmedial line deep rufous, excurved below costa, then incurved and with some dark points on it, dentate at veins 4, 3, then bent inwards to origin of vein 2 and oblique to vein 1; subterminal line indistinct, pale, excurved below vein 7 and at middle; a fine yellowish line at base of cilia. Hind wing grey-brown, the cilia brownish at base, white at tips; the underside whitish, the costal half tinged with rufous, a curved punctiform postmedial line from costa to vein 3.

Q. Head, thorax, and fore wing deeper and more uniform rufous, the last with the ante- and postmedial lines defined by white.

Ab. 1. ♂ ♀. Head, thorax. and fore wing dark purplish brown. Hab. N.W. RHODESIA, Alala plateau (Neave), 1 ♂, 3 ♀, Kapopo (Neave), 2 ♂, 1 ♀ type; N.E. RHODESIA, E. Luangwa distr. (Neave), 1 ♂, 2 ♀, Luangwa valley (Neave), 1 ♂, 1 ♀, Kalungwisi distr. (Neave), 1 ♀, Bangweolo distr. (Neave), 5 ♀, Mansya R. (Neave), 7 ♂, 1 ♀, Mpika (Neave), 1 ♂; MASHONALAND, Salisbury (Marshall), 1 ♂. Exp. 36-40 mm.

COSMOPHILA RETRACTA, sp. n. (Pl. XXXVII. fig. 20.)

 \mathcal{J} . Head and thorax red-brown; abdomen grey-brown; pectus, femora, and ventral surface of abdomen whitish. Fore wing silky red-brown with a greyish olive tinge and slight fuscous irroration; antemedial line indistinct, double, waved; a blackish point in middle of cell and two blackish and white discoidal points; postmedial line whitish, obliquely excurved from costa to vein 3, then retracted to before lower angle of cell and obliquely excurved to inner margin; an indistinct pale subterminal line with small obscure fuscous spots on its inner edges, excurved below vein 7 and at middle. Hind wing grey-brown, the terminal area rather darker; cilia with a fine white line at base and white tips; the underside white tinged and irrorated with brown, a brown postmedial line from costa to vein 5.

Hab. Congo, Katanga, Kambove (Neave), 3 & type; N.W. RHODESIA, Kapopo (Neave), 1 & . Exp. 36 mm.

MESOGENEA PERSINUOSA, sp. n. (Pl. XXXVII. fig. 10.)

Q. Head and thorax red-brown with a white streak on vertex; palpi white at base and tips; abdomen grey-brown; pectus, legs, and ventral surface of abdomen white slightly irrorated with brown, the last with blackish sublateral points on terminal segments. Fore wing red-brown sparsely striated with black; antemedial line white, slightly angled outwards below costa, then somewhat inwardly oblique; a black point in middle of cell; postmedial line white, very strongly bent outwards from below costa to vein 4, then retracted to origin of vein 2 and very oblique to inner margin; faint traces of a sinuous dark subterminal line; a fine whitish line at base of cilia. Hind wing greyish suffused with brown, the terminal area darker; a fine pale line at base of cilia which are white at tips; the underside with the costal area grey striated with black.

Ab. 1. Head, thorax, and fore wing brown tinged with grey, the head and thorax without the white streak; fore wing with 1910.]

the lines dark, the postmedial line faintly defined by grey on outer side and with patches of dark suffusion on it in its sinus and at inner margin, no white line at base of cilia.

J. Head, thorax, and fore wing black-brown, the tegulæ in front and the edges of patagia sometimes white; the fore wing with the lines very indistinct, the point in cell edged with white above, some white irroration before subterminal line especially towards costa.

Hab. CONGO, Katanga, Kambove (Neave), 1 & type; N.E. RHODESIA, Petauke (Neave), 2 Q; BR.C. AFRICA, Zomba (Rendall), 1 &; MASHONALAND, Salisbury (Marshall, Dobbie), 2 &. Exp. 24-28 mm.

RHYNCODES NIGRICILIATA, sp. n. (Pl. XXXVII. fig. 18.)

Palpi upturned, the 2nd joint reaching to above vertex of head and fringed with hair above at extremity, the 3rd porrect; antennæ of male minutely serrate and ciliated; fore wing with the termen strongly excised below apex and excurved at middle, then again excised.

Head, thorax, and abdomen yellow suffused with whitish; palpi, antennæ, and fore and mid legs in front rufous. Fore wing yellow suffused with whitish with a faint violaceous tinge, the costal edge rufous; a rufous medial line with blackish mark at costa, angled outwards below costa, then oblique; two blackish discoidal points; a straight rufous line with blackish mark at costa from costa before apex to tornus; two black points on costa towards apex, three on termen at the excision below apex, and three above tornus; the cilia rufous, black-tipped at the excisions. Hind wing yellow, with black points on termen between veins 7 and 3; the underside faintly tinged with rufous and with slight dark irroration, a black discoidal point and terminal series of points.

Hab. GOLD COAST, Kumasi (Whiteside), 1 & type; N.E. RHODESIA, Kalungwisi valley (Neave), 1 ♀. Exp. ♂ 24, ♀ 34 mm.

PANTIDIA ANDERSONI Feld. Reis. Nov. pl. 115. f. 13 (1874).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, Luangwa R.

PANTIDIA SCISSA Wlk. XXXIII. 851 (1865).

N.E. RHODESIA, Kalungwisi valley.

FODINA EMBOLOPHORA Hmpsn. Ann. S. Afr. Mus. ii. p. 364 (1902).

N.E. RHODESIA, E. Luangwa distr.

BANIANA HETEROSPILA, sp. n. (Pl. XXXVII. fig. 27.)

Antennæ of male bipectinate with moderate branches, the apical part ciliated, of female with short branches, mid tibiæ with fringe of long hair below.

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Head, tegulæ, and front of thorax chocolate-brown, the rest of thorax and abdomen vellowish white irrorated with brown: antennæ brown. Fore wing yellow tinged with rufous and irrorated with dark brown; a small dark brown spot at base of costa: an oblique chocolate-brown antemedial mark from costa and clavate band from just above median nervure to inner margin forming a triangular mark in submedian interspace, these markings defined by whitish; orbicular and reniform black-brown defined by whitish, the former small, round, the latter an oblique lunule; postmedial line chocolate-brown defined by whitish, forming a wedge-shaped mark at costa, then slight, oblique to vein 3, then retracted to origin of vein 2 and sinuous to inner margin where it forms a spot; a conical black-brown patch on costa towards apex, defined by whitish and with two whitish points on costa, a somewhat lunulate chocolate-brown line just before termen; cilia rufous. Hind wing yellowish irrorated with red-brown: a slightly sinuous rufous terminal line; cilia rufous with a yellowish line at base; the underside yellow, the costal area irrorated with brown.

Hab. UGANDA, Entebbe (*Minchin*), $1 \ \varphi$; CONGO, Lualaba R. (*Neare*), $1 \ \varphi$; N.E. RHODESIA, E. Luangwa distr. (*Neare*), $1 \ \varphi$, Luangwa valley (*Neare*), $1 \ \beta$, $1 \ \varphi$, Chambezi valley (*Neare*), $2 \ \beta$, $1 \ \varphi$ type. *Exp.* 34 mm.

BANIANA PYRAMIDALIS, sp. n. (Pl. XXXVII. fig. 28.)

 σ . Head and tegulæ rufous; thorax and abdomen yellowish white with some rufous on prothorax and base of patagia. Fore wing yellow; the costal edge chocolate-brown at base; a triangular chocolate-brown mark in submedian interspace just before middle, its inner angle connected with a small triangular spot on inner margin, another small triangular spot on inner margin just beyond it; a conical chocolate-brown patch on costa towards apex with two yellowish points on costa. Hind wing pale yellow.

- \bigcirc . Fore wing sparsely irrorated with dark brown; a dark brown point on costa near apex and a series of slight lumules just before termen.

Hab. N.E. RHODESIA, Luangwa valley (*Neare*), 1 \circ type, Chambezi valley (*Neare*), 1 \circ . *Exp.* 36 mm.

BANIANA ANGULINA Mab. C. R. Ent. Soc. Belg. xxi, p. lxi (1881).

N.E. RHODESIA, Luangwa R., Chambezi valley.

BANIANA ASPILA, sp. n. (Pl. XXXVII. fig. 29.)

Antennæ of male bipectinate with moderate branches to near apex; mid tibiæ fringed with hair above, the hind tibiæ below.

 \mathcal{S} . Head, thorax, and abdomen pale yellow faintly tinged with rufous, the back of head and tegulæ velvety black; fore and mid tibiæ in front black-brown. Fore wing yellow tinged with rufous and irrorated with black; an antemedial black point just below cell with traces of an oblique line from it to inner margin; a black

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point in middle of cell and slight discoidal lunule; postmedial line faint, yellowish with very incomplete series of black points and striæ on it, bent outwards below costa, at vein 3 retracted to just below angle of cell and slightly bent outwards to inner margin; faint trace of a subterminal dark shade incurved at discal fold; a series of black points just before termen. Hind wing ochreous white, the terminal area suffused with fuscous except at tornus; cilia ochreous white: the underside with the costal area slightly irrorated with brown, the terminal area with fuscous from apex to vein 2.

2. Hind wing darker with dark discoidal lunule.

Hab. N.E. RHODESIA, E. Luangwa distr., Mterize R. (Neave), 1 & type, Mbala country (Neave), 1 &, Chambezi valley, (Neave), 3 &, 1 Q, Mansya R. (Neave), 1 &; Br. C. AFRICA, Zomba (Johnston), 2 &. Exp. 38 mm.

BANIANA DISJUNCTA Wlk. XXXIII. 999 (1865).

N.E. RHODESIA, Luangwa valley, Chambezi valley, Chinsali distr., Bangweolo distr.

BANIANA HAMIFERA Hmpsn, Ann. S. Afr. Mus. ii. p. 401 (1902).

N.E. RHODESIA, Luangwa distr.

BANIANA TRIGONOSPILA, sp. n. (Pl. XXXVII. fig. 19.)

Antennæ of male bipectinate with moderate branches, the apex ciliated; palpi with the 3rd joint long, with tuft of hair above at base.

d. Head white, the palpi and antennæ brown; thorax and abdomen grey mixed with brown. Fore wing grey suffused and irrorated with brown, the subcostal area whitish to postmedial line: a slight subbasal dark mark on costa and two antemedial marks; a triangular black-brown patch on inner area from near base to before middle where it extends from cell to inner margin; a small clavate black mark in middle of cell and a U-shaped black mark filled in with white at lower angle, a dark mark above it on costa: postmedial line blackish defined on outer side by whitish and with dark mark at costa, slightly incurved below costa and incurved below vein 4; a whitish subterminal line excurved below vein 7 where there is a blackish mark on its inner side and excurved at middle, then incurved and obsolescent; an oblique blackish mark from apex; a terminal series of black striæ and whitish line at base of cilia. Hind wing grey-brown; the underside whitish irrorated with fuscous, the terminal area suffused with fuscous, a small black discoidal spot, traces of a curved medial line and indistinct crenulate postmedial line.

Hab. N.W. RHODESIA, Kapopo (Neave), 1 & ; N.E. RHODESIA, upper Luangwa R. (Neave), 1 & type. Exp. 28 mm.

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BANIANA ATRIPLAGA Wlk. xv. 1795 (1858).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

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BANIANA CULMINIFERA, sp. n. (Pl. XXXVII, fig. 30.)

Antennæ of male with servations ending in a bristle, of female ciliated : fore and mid tibiæ with tuft of long hair below.

Head, thorax, and abdomen greyish ochreous mixed with fuscous, the vertex of head and tips of tegulæ blackish; palpi, pectus, and ventral surface of abdomen reddish ochreous, the palpi with darker band at extremity of 2nd joint. Fore wing greyish ochreons tinged with rufous and irrorated with brown to the postmedial line, the terminal area grey suffused with fuscous; subbasal line represented by a black striga from costa; antemedial line with black mark at costa, then red-brown, waved; a black striga from middle of costa defined on outer side by whitish; a black discoidal striga; postmedial line black slightly defined on outer side by rufous, arising below costa, incurved at discal fold, at vein 3 bent upwards to the discoidal striga, then sinuous to inner margin, some white points beyond it on costa; faint traces of a subterminal line, excurved below vein 7 and at middle; a terminal series of black points. Hind wing grey-brown, the terminal area suffused with fuscous; cilia grey at tips; the underside with terminal series of slight dark lunules.

Ab. 1. Fore wing with the pale area reddish ochreous without grey tinge, a black discoidal point not connected with the postmedial line.

Hab. N.W. RHODESIA, Alala plateau (*Neave*), $1 \Leftrightarrow$; N.E. RHODESIA, E. Luangwa distr. (*Neave*), $5 \Leftrightarrow$, $4 \Leftrightarrow$ type, Luangwa R. (*Neave*), $1 \Leftrightarrow$. *Exp.* 28–30 mm.

PLECOPTERA TRIPALIS Wilgrn. Wien. Ent. Mon. vii. p. 149 (1863).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

PLECOPTERA MEGARTHRA, Sp. n. (Pl. XXXVII. fig. 31.)

Antennæ of male serrate and fasciculate.

Mid tibiæ of male fringed with very long hair below, the 1st joint of tarsus dilated; tibiæ, coxæ, and base of abdomen below with tufts of hair.

 σ . Head and thorax brown mixed with grey; legs with the tufts of hair ochreous white; abdomen grey with fuscous mixed. Fore wing purplish grey irrorated with brown, the terminal area suffused with chocolate-brown; antemedial line black defined on inner side by whitish, almost straight and erect; two black discoidal points connected by a whitish striga, with a black and whitish striga above it from costa; postmedial line black defined on inner side by whitish and on outer slightly by rufous, arising below costa; straight, oblique; some white points on postmedial part of costa; faint traces of a sinuous subterminal line; a terminal area darker; a fine dark terminal line; cilia greyish at tips; the underside grey thickly irrorated with brown, the terminal

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area darker, a dark discoidal point and indistinct curved postmedial line.

Hab. N.E. RHODESIA, E. Luangwa distr., Mbala country (Neave), 1 & type, Petauke (Neave), 1 &, Niamdazi R. (Neave), 1 &. Exp. 34 mm.

PLECOPTERA MELALEPIS, sp. n. (Pl. XXXVII. fig. 32.)

Mid tibiæ of male fringed with long hair below.

Head and tegulæ pale rufous; thorax purplish grey mixed with brown; mid tibiæ of male with the tufts of hair blackish; abdomen grey suffused with brown. Fore wing purple-grey, irrorated with large black and whitish scales except on costal and terminal areas; antemedial line slight, black defined on inner side by whitish, nearly straight and erect; two black discoidal points with a black striga defined on outer side by whitish above them from costa; postmedial line black defined on inner side by white, arising below costa, nearly straight and oblique; some white points on postmedial part of costa; subterminal line indistinct, grey, angled inwards at discal fold and outwards at middle, then incurved; a series of black points just before termen. Hind wing fuscous brown; a terminal series of blackish striæ; the underside whitish thickly irrorated with brown, the terminal area darker, a black discoidal point and indistinct curved postmedial line.

Hab. N.E. RHODESIA, E. Luangwa distr. (Neave), 4 5, 2 9 type, Luangwa R. (Neave), 1 9. Exp. 32 mm.

PLECOPTERA FLAVILINEA, sp. n. (Pl. XXXVII. fig. 33.)

Head and tegulæ yellow tinged with rufous; thorax purplish grey mixed with brown; pectus and legs whitish mixed with brown : abdomen grey suffused with brown. Fore wing purplish grey tinged with brown and irrorated with a few black scales, the postmedial area suffused with chocolate-brown; antemedial line rufous defined on inner side by yellow, slightly angled outwards below costa, then erect and somewhat sinuous; two black discoidal points on a red-brown bar, a red-brown bar above them from costa defined on outer side by whitish; postmedial line rufous defined on inner side by yellow, arising below costa, oblique, straight; some white points on postmedial part of costa; traces of a waved grey subterminal line; a terminal series of black points; cilia whitish at tips. Hind wing grey-brown, the terminal area tinged with fuscous; cilia whitish at tips; the underside whitish thickly irrorated with brown, the terminal area darker, a slight dark discoidal lunule and traces of a postmedial line.

Hab. S. NIGERIA, Lagos (*Boag*), $1 \circ \sharp$; BR. C. AFRICA, Fwambo, $1 \circ \sharp$; N.W. RHODESIA, Alala plateau (*Neave*), $2 \circ \sharp$, $1 \circ \sharp$ type; N.E. RHODESIA, E. Luangwa distr. (*Neave*), $1 \circ \sharp$, Bangweolo distr. (*Neave*), $3 \circ \sharp$. *Exp.* 30–34 mm. PLECOPTERA THERMOZONA, sp. n. (Pl. XXXVII. fig. 34.)

Head, thorax, and abdomen pale grey mixed with brown. Fore wing pale grey tinged with rufous and slightly irrorated with black; antemedial line rufous defined on inner side by yellow, slightly angled outwards below costa, then erect and somewhat sinuous; two rufous discoidal points with a striga above them from costa; postmedial line dark brown with a narrow yellow band on inner side, its inner edge defined by a faint sinuous brown line, arising below costa, oblique, straight; the postmedial area chocolate-red with some white points on costa, its outer edge bent outwards to apex, at middle, and to tornus and incurved at discal fold and below vein 3, the slight grey subterminal line just before the edge and somewhat dentate at veins 7, 6, 4, 3; a series of black points just before termen. Hind wing pale grey-brown, the terminal area darker; the underside pale grey thickly irrorated with brown, a slight discoidal lunule and curved postmedial line.

Hab. N.E. RHODESIA, N. Luangwa, Mt. Ulungu (Neave), 1 ♀, E. Luangwa distr., Mterize R. (Neave), 1 ♂ type. Exp. 34 mm.

PLECOPTERA LANIATA, sp. n. (Pl. XXXVII. fig. 35.)

Antennæ of male minutely serrate with long bristles and cilia; mid and hind tibiæ fringed with long hair below; the ventral surface of abdomen with woolly hair on basal segment.

Head and thorax grey mixed with red-brown; abdomen grey suffused with fuscous brown, the hair on ventral surface of male ochreous white. Fore wing grey tinged with rufous and slightly irrorated with black; antemedial line red-brown defined on inner side by yellow, straight, erect; two brown discoidal points with a slight angled mark above them on costa defined on outer side by vellowish; postmedial line red-brown defined on both sides by yellowish and with slight blackish line beyond it arising just below costa, oblique, slightly bent outwards to inner margin; some white points on postmedial part of costa; subterminal line blackish, angled outwards at veins 4, 3, then incurved and ending at tornus; a series of black points just before termen. Hind wing grey-brown, the terminal area suffused with fuscous: the underside greyish suffused and irrorated with brown, a slight discoidal lunule and diffused sinuous postmedial line, the terminal area suffused with fuscous.

Ab. 1. Head, thorax, abdomen, and fore wing pale ochreous yellow, the last with the postmedial area tinged with brown; hind wing yellowish except the terminal area.

Hab. N.E. RHODESIA, E. Luangwa distr. (Neave), $1 \circ 1 \circ 1 \circ 1$ type, Luangwa R. (Neave), $4 \circ 1 \circ 1 \circ 1$; TRANSVAAL, White R. (Cooke), $1 \circ 1 \circ 1 \circ 1$. Exp. 34-40 mm.

PLECOPTERA INFUSCATA, sp. n. (Pl. XXXVII. fig. 17.)

Antennæ of male minutely serrate with long bristles and cilia; mid femora from extremity and hind femora from base with tufts of long rufous hair.

J. Head deep rufous, the basal joint of antennæ yellowish white in front; thorax and abdomen grey-brown. Fore wing grey tinged with rufous and suffused with fuscous brown, the postmedial area pale, the terminal area darker; traces of a dark antemedial line, excurved to below cell, then oblique; a white point at origin of vein 2; a diffused blackish discoidal lunule; postmedial line oblique from costa to vein 6, then hardly traceable, incurved below vein 4; subterminal line indistinct, dark with series of slight white points on it, excurved below vein 7 and at middle, then incurved and ending at tornus; a terminal series of slight dark striæ; cilia rufous. Hind wing pale reddish brown, the terminal area suffused with fuscous, narrowing to tornus: cilia rufous, fuscous towards apex. Underside of fore wing white tinged with brown except on postmedial area, the terminal area fuscous, the costa rufous irrorated with brown, the discoidal lunule blackish; hind wing whitish irrorated with brown, the terminal area fuscous, a dark discoidal spot and rather diffused postmedial line.

Hab. N.E. RHODESIA, E. Luangwa distr., Petauke (Neave), 1 & type. Exp. 40 mm.

PLECOPTERA TRICHOPHORA, sp. n. (Pl. XXXVII. fig. 26.)

Antennæ of male with long bristles and cilia; fore femora and tibiæ below, mid tibiæ below and 1st joint of tarsus above and hind coxæ with tufts of long hair; fore wing with the inner area near base clothed with long woolly hair.

 σ . Head and thorax grey-brown; palpi pale ochreous; fore and mid legs with the tufts of hair fuscous brown, hind coxæ with ochreous tufts; abdomen grey suffused with fuscous, the anal tuft tinged with rufous. Fore wing purplish grey irrorated with black, some black suffusion beyond postmedial line and on apical area, the woolly hair near base black-brown; two black discoidal points; postmedial line black slightly defined by rufous, strongly bent outwards and obsolescent below costa and slightly incurved below vein 4, some white points beyond it on costa; subterminal line blackish, dentate, angled outwards at vein 7 and excurved at middle; a terminal series of black points. Hind wing grey-brown suffused with fuscous; the underside suffused with fuscous brown, a black discoidal striga.

Hab. N.E. RHODESIA, Chambezi valley (Neave), 2 d, Lake Bangweolo (Neave), 1 d type. Exp. 38 mm.

PLECOPTERA SARCISTIS, sp. n. (Pl. XXXVII. fig. 8.)

Legs of male normal.

 \mathcal{J} . Head and tegulæ black-brown; palpi whitish in front; frons with white bar connecting lateral streaks; vertex of head creamy white; thorax ochreous tinged with rufous; pectus, legs, and abdomen ochreous tinged with brown. Fore wing ochreous strongly tinged with rufous; a black discoidal point; postmedial line black, arising below costa, oblique to discal fold, then faint and inwardly oblique to vein 2, where it joins an oblique black line from lower angle of cell and terminates; a series of slight blackish points just before termen; cilia fuscous brown. Hind wing pale glossy brown tinged with rufous, the cilia whitish except at base; the underside white tinged and irrorated with brown.

Hab. N.E. RHODESIA, Kalungwisi distr. (Neave), 2 & type. Exp. 34 mm.

PLECOPTERA RESISTENS, Wlk. xv. 1749 (1858).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Kalungwisi valley.

PLECOPTERA PUNCTILINEATA, sp. n. (Pl. XXXVII. fig. 9.)

Head and tegulæ pale rufous; thorax and abdomen grey-brown; pectus, legs, and ventral surface of abdomen white. Fore wing red-brown very slightly irrorated with black; obliquely placed subbasal black points below costa and cell; antemedial line with black striga from costa, then red-brown, sinuous; reniform rufous or black with slight white annulus; postmedial line with black striga from costa, then red-brown with series of black points on it, slightly bent outwards below costa, incurved at discal fold and below vein 4, some white points beyond it on costa; subterminal line with series of black and white points on it, forming two small spots below costa, angled outwards at vein 7 and excurved at middle; a series of black points just before termen. Hind wing pale reddish brown, the terminal area suffused with fuscous; the underside whitish irrorated with brown, the terminal area suffused with fuscous, a dark discoidal point and indistinct sinuous postmedial line.

Hab. W. AFRICA, Oil Rivers, $1 \ \varphi$; BR. E. AFRICA (*Gregory*), 1 φ , Takaunga (*Thomas*), $1 \ \varphi$; UGANDA (*Christy*), $1 \ \vartheta$; N.E. RHODESIA, E. Luangwa distr. (*Neave*), $4 \ \vartheta$, $9 \ \varphi$ type, Luangwa valley (*Neave*), $1 \ \vartheta$, Chambezi valley (*Neave*), $1 \ \vartheta$, Mpika (*Neave*), $1 \ \vartheta$; MASHONALAND, Salisbury (*Marshall*), $1 \ \vartheta$, $3 \ \varphi$; GAZALAND, Chirinda forest (*Marshall*), $1 \ \vartheta$, $1 \ \varphi$. *Exp.* 30–34 mm.

PLECOPTERA GRISEA, sp. n. (Pl. XXXVIII. fig. 1.)

Antennæ of male minutely ciliated.

Fore femora and tibiæ of male below and mid tibiæ above fringed with long hair.

 \mathcal{S} . Head, thorax, and abdomen grey slightly tinged with brown; palpi, frons, antennæ, and the fringes of hair on legs fuscous black. Fore wing grey irrorated with brown; antemedial line very indistinct, dark, waved; a black point in middle of cell; reniform tinged with rufous and faintly defined by blackish; postmedial line indistinct, dark, minutely waved, incurved below vein 4, some whitish points beyond it on costa; subterminal line whitish defined on inner side by red-brown suffusion and a blackish spot in submedian interspace, waved, slightly excurved below vein 7 and at middle; a series of black points before termen and a fine waved black terminal line. Hind wing grey irrorated with brown; traces of a dark medial line and of a minutely waved subterminal line; a series of black points just before termen, a fine black terminal line and white line at base of cilia. Underside of fore wing and costal area of hind wing suffused with blackbrown, the rest of hind wing whitish striated with fuscous.

Hab. N.E. RHODESIA, Kalungwisi valley (Neave), 1 3 type. Exp. 36 mm.

PLECOPTERA RUFIRENA Hmpsn. Ann. S. Afr. Mus. ii. p. 367 (1902).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, Chambezi valley, Fort Jameson; PORTUGUESE E. AFRICA, S. Angoniland.

PLECOPTERA FLAVICEPS Hmpsn. Ann. S. Afr. Mus. ii, p. 403 (1902).

N.W. RHODESIA, Alala plateau: N.E. RHODESIA, Serenji distr., Luangwa distr., Chinsali distr., Chambezi valley.

GNAMPTOGYIA DIAGONALIS, Sp. n. (Pl. XXXVIII. fig. 2.)

Head and thorax pale yellow pencilled with red-brown; abdomen pale yellow dorsally tinged with rufous and with slight white and fuscous segmental lines; palpi in front, pectus, legs, and ventral surface of abdomen yellowish white, the fore and mid tibiæ streaked with rufous. Fore wing yellowish white, the terminal area greyish rufous; a double very oblique rufous line from costa before middle to inner margin near base; a black point in end of cell; three very oblique white lines defined on each side by rufous from below costa beyond middle to middle of inner margin; a double very oblique rufous line from below apex to inner margin beyond middle; an indistinct double obliquely curved rufous subterminal line with a series of black points beyond it; cilia white at base followed by a dark line, brown at middle and white at tips, with a dark line through them. Hind wing pale yellow with some rufous striæ above medial part of vein 1: two rufous subterminal lines indistinctly double towards inner margin, with some black suffusion beyond them towards apex and some black points towards tornus; cilia white at base followed by a dark line, brown at middle and white at tips, with a dark line through them; the underside pale yellow sparsely irrorated with brown scales, a series of black points before termen from apex to vein 2.

Ab. 1. Head, thorax, and fore wing grey suffused with brown and without yellow tinge; abdomen grey suffused with fuscous; hind wing grey tinged with brown and with three double medial lines extending to below costa, the terminal area suffused with fuscous except towards tornus.

Hab. BR. E. AFRICA, Taveta (Rogers), 1 &, Tana R. (Crawshay),

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1 \heartsuit ; N.E. RHODESIA, E. Luangwa distr. (*Neare*), 3 \circlearrowright , Luangwa valley (*Neare*), 1 \circlearrowright type. *Exp.* 20–28 mm.

ANTARCHÆA SUBFLAVALIS Wlk. XXXIII. 1205 (1865). N.E. RHODESIA, Chambezi valley.

ANTARCHÆA FRAGILIS Butl. A. M. N. H. (4) xvi. p. 413 (1875). N.E. RHODESIA, upper Luangwa valley, Chambezi valley.

ANTARCHÆA DUPLICALIS Wlk. XXXIII. 1205 (1865).

N.E. RHODESIA, E. Luangwa distr.

ANTARCHÆA HÆMACEPS, sp. n. (Pl. XXXVIII. fig. 10.)

Head and tegulæ blood-red mixed with some black; thorax and abdomen ochreous tinged with blood-red; legs blood-red, the Fore wing olive-ochreous tinged with blood-red, tarsi fuscous. the terminal area tinged with brown except at apex and tornus; a blackish point in base of cell, a subbasal blackish striga below costa and point in cell: obliquely placed antemedial reddish points below costa and in and below cell; reniform faintly defined by blood-red, with reddish point in upper part and blackish point in lower, an incurved reddish line from just beyond it to inner margin where there is a blackish point; postmedial line reddish, slightly bent outwards below costa, then minutely waved, slightly angled inwards at discal fold and incurved below vein 4; subterminal line brownish, slightly excurved below vein 7 and at middle, the veins beyond it with faint pale streaks with black points on them before termen; cilia blood-red with a fine dark line near tips. Hind wing yellowish tinged with blood-red, the area from end of cell to just before termen suffused with fuscous, leaving the termen blood-red with a series of black points just before it; cilia blood-red; the underside whitish thickly irrorated and suffused with blood-red except the inner area, a series of black points before termen.

Hab. N.E. RHODESIA, E. Luangwa distr. (Neave), 2 5 type, Luangwa R. (Neave), 1 5; NATAL, Durban (Leigh), 1 2. Exp. 30 mm.

ANTARCHÆA OLIVESCENS, sp. n. (Pl. XXXVIII. fig. 13.)

 \mathcal{J} . Head blood-red mixed with black-brown; thorax and abdomen olive-ochreous faintly tinged with red; fore and mid tibiæ strongly tinged with red, the tarsi fuscous with pale rings. Fore wing olive-ochreous faintly tinged with red and sparsely irrorated with brown; an antemedial brown point below the cell; two black discoidal points; a faint reddish medial line, oblique from costa to beyond lower angle of cell, then inwardly oblique; faint traces of a double postmedial line with slight brown spots on it at discal and submedian folds, excurved from below costa to vein 4, then incurved; a series of small black-brown subterminal spots from costa to vein 4 and a series of points just before 1910.]

termen with slight striæ beyond them; cilia reddish with a blackbrown line near tips. Hind wing yellow, the inner half faintly tinged with red and sparsely irrorated with black; some fuscous suffusion at apex; a series of black points just before termen and fine waved terminal line; cilia reddish with brown line near tips; the underside yellow sparsely irrorated with black except on inner area, the apex tinged with crimson, a black discoidal striga.

 \mathcal{Q} . Wings not tinged with red.

Hab. N.E. RHODESIA, Luangwa valley, Petauke (*Neave*), 1 σ type, N. Luangwa, Mt. Ulungu (*Neave*), 1 \circ . *Exp.* 30 mm.

ANTARCHÆA LENTISTRIATA, Sp. D. (Pl. XXXVIII. fig. 20.)

 σ . Head, thorax, and abdomen ochreous yellow, the head tinged with red, the antennæ blackish; fore and mid tibiæ red. Fore wing ochreous yellow finely striated with pale red-brown and irrorated with a few black scales; traces of a brownish ante-medial line, oblique from costa to middle of cell, then sinuous; a minute black point at lower angle of cell; postmedial line faint, brownish, excurved below costa and incurved at discal fold and below vein 4; subterminal line represented by faint dark points from below costa to vein 5; a series of blackish points just before termen. Hind wing ochreous yellow finely striated with pale red-brown except on basal and costal areas, and irrorated with a few black scales; faint traces of a sinuous postmedial line; a series of blackish points just before termen and a terminal series of slight striæ; the underside pale yellow slightly irrorated with brown except on inner area.

Hab. N.È. RHODESIA, E. Luangwa distr., Mterize R. (Neave), 1 & type. Exp. 32 mm.

ANTARCHÆA UMBRIFERA, Sp. n. (Pl. XXXVIII. fig. 3.)

d. Head, thorax, and abdomen black-brown mixed with grey; tarsi ringed with white. Fore wing whitish tinged with redbrown and thickly striated with dark brown, the postmedial area paler; traces of a curved blackish subbasal line; antemedial line rather diffused, blackish, sinuous, interrupted; a black point defined by whitish at lower angle of cell; an indistinct sinuous medial dark shade; postmedial line rather diffused, dark, double from costa to vein 4, excurved below costa and at middle; traces of a subterminal dark line with a series of blackish points on it, slightly excurved at vein 7 and middle; a series of black points just before termen. Hind wing whitish tinged with red-brown and striated with brown; an indistinct double postmedial line on inner area, traces of a sinuous subterminal line and a series of black points just before termen; the underside white faintly tinged with brown and irrorated with fuscous, a blackish discoidal point, traces of a postmedial line excurved beyond the cell and three black points before termen towards apex.

Hab. N.E. RHODESIA, Chambezi valley (Neare), 1 of type. Exp. 32 mm.

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ANTARCHÆA HÆMATOESSA, sp. n. (Pl. XXXVIII. fig. 23.)

Q. Head, thorax, and abdomen ochreous suffused with bloodred. Fore wing ochreous suffused with blood-red; a small subbasal red spot in cell; antemedial small red spots below costa and in cell and blackish strize below the cell and above inner margin; a small red spot in middle of cell; a figure-of-eightshaped ochreous discoidal mark, defined by red and with black points in upper and lower parts; postmedial line double, the outer line formed of small lunulate spots defined on outer side by ochreous, excurved below costa, then oblique; subterminal line formed of red striæ defined on inner side by ochreous, slightly excurved below costa and minutely waved from vein 5 to inner margin; a series of red points well before termen; cilia with a fine crimson line at middle and whitish tips. Hind wing ochreous suffused with blood-red; a terminal series of red striæ: cilia white at tips; the underside suffused and irrorated with blood-red, two indistinct postmedial lines.

Hab. N.W. RHODESIA, Alala plateau, Mkushi distr. (*Neave*), $1 \Leftrightarrow$ type. *Exp.* 26 mm.

RAPARNA TRITONIAS Hmpsn. Ann. S. Afr. Mus. ii. p. 395 (1902).

N.E. RHODESIA, Tanganyika plateau, Kalungwisi distr., Bang-weolo distr.

ACANTHOLIPES NOTATA Hmpsn. Ill. Het. B. M. viii. p. 84, pl. 146. f. 3 (1891).

N.E. RHODESIA, N. Luangwa, Mt. Ulungu.

ACANTHOLIPES MISER Butl. P.Z.S. 1883, p. 166.

N.E. RHODESIA, E. Luangwa distr.

Acantholipes trifasciata Moore, P.Z.S. 1877, p. 612.

Coxgo, Katanga, Kambove, Lualaba R.

ACANTHOLIPES OCHROTA Hmpsn. Trans. Zool. Soc. xix. p. 113, pl. iv. f. 23 (1909).

N.E. RHODESIA, Bangweolo distr.

PLEURONA TROGOPERA, sp. n. (Pl. XXXVIII. fig. 4.)

Fore wing with the termen excised below apex and angled at vein 5, a minute hyaline groove just beyond the discocellulars.

 \mathcal{S} . Head, thorax, and abdomen grey suffused with reddish brown and irrorated with fuscous, the last with sublateral series of black points. Fore wing grey suffused with brown and thickly irrorated with black; antemedial line rather diffused, black, angled outwards below costa, then very oblique; medial line black, stronger at costa, angled outwards beyond the slight black discoidal striga, then very oblique; postmedial line double, black at costa, then slight, oblique to vein 4, then inwardly oblique and 1910.]

waved; subterminal line slight, dark, minutely waved and somewhat angled outwards above and below vein 4; a series of minute black points just before termen; a fine black terminal line; cilia black-brown. Hind wing grey suffused with brown and thickly irrorated with black; an oblique black antemedial line not reaching costa; indistinct double waved medjal and subterminal lines, the latter with a series of black points on its inner edge; a series of minute black points just before termen and a fine black terminal line; cilia black-brown; the underside whitish tinged with brown and irrorated with black, the antemedial and medial lines as above, a subterminal series of black points.

Hab. N.E. RHODESIA, Chinsali distr. (Neave), 1 & type. Exp. 28 mm.

DIOMŒA TENEBROSA Holl. Psyche, vii. p. 90, pl. iii. f. 17 (1894). N.E. Rhodesia, E. Luangwa distr.

THERMESIA IRRORATA Fabr. Spec. Ins. ii. p. 506 (1781).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley, Chambezi valley, Bangweolo distr., Mansya R., Mpika.

PARATHERMES LOPHOCERA, sp. n. (Pl. XXXVIII. fig. 6.)

Autennæ of male with large tuft of hair at one-third from base. Head, thorax, and abdomen grey-brown; palpi with the extremity of 2nd joint blackish, the 3rd joint blackish, white at base and tips; mid and hind tarsi whitish; abdomen with slight whitish segmental lines. Fore wing grey-brown; subbasal line represented by a black and white point on costa, then by slight points; antemedial line black defined on each side by white at costa, excurved below costa, then slight, oblique, sinuous, interrupted; a slight dark discoidal spot; postmedial line blackish, defined on each side by white at costa, then slightly by grey on outer side, excurved below costa, then oblique and minutely waved, some small triangular pure white marks beyond it on costa with blackish streaks between them; a faint dark subterminal shade; a terminal series of black and white striæ. Hind wing grey-brown; a slight dark discoidal bar; postmedial line black-brown faintly defined on outer side by grey, slightly sinuous; a fine black-brown terminal line defined on inner side by a fine white line; the underside with blackish discoidal spot and curved minutely waved postmedial line.

Hab. Congo, Lualaba R. (Neave), 1 ♂; N.E. RHODESIA, Chambezi valley (Neave), 11 ♂, 24 ♀ type. Exp. 24-28 mm.

PARATHERMES MARCHALI Boisd. Faun. Ent. Madag. & Maur., Lép. p. 105, pl. 13. f. 4 (1834).

Congo, Lualaba R.; N.W. RHODESIA, Alala plateau, Kapopo; N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Mt. Ulungu, Chambezi valley, Kalungwisi valley, Lake Bangweolo, Fort Jameson, Tanganyika plateau.

PARATHERMES ATRIPUNCTATA, sp. n. (Pl. XXXVIII. fig. 7.)

Head and thorax rufous irrorated with fuscous; palpi whitish irrorated with fuscous and with red band near extremity of 3rd joint; antennæ blackish; tegulæ grey at base; pectus and legs white irrorated with brown, the tibiæ rufous, the tarsi black ringed with white; abdomen grey-brown, the base tinged with rufous, the anal tuft rufous, the ventral surface white irrorated with brown. Fore wing grey-brown more or less strongly suffused with rufous and sparsely irrorated with black; subbasal line double, red with black point at costa, inwardly oblique and ending at submedian fold; antemedial line red, inwardly oblique and minutely waved, with black point at costa and sometimes two others in cell; a slight brown discoidal lunule; medial line indistinct, dark, bent outwards below costa, angled inwards at discal fold, incurved below vein 4 and with black point on it at submedian fold, closely approximated to the postmedial line, which is red with black point at costa, defined on outer side by ochreous, bent outwards below costa, slightly incurved at discal fold, incurved below vein 4; subterminal line ochreous, defined on inner side by black spots between veins 7 and 4 and on outer by blackish points and striæ, incurved to vein 4 where it is angled outwards, then again incurved, some dark and pale points before it on costa; a series of small black spots just before termen and a terminal series of striæ; cilia with blackish spots near base and black line defined on inner side by ochreous near tips. Hind wing grev-brown more or less suffused with rufous and irrorated with black, the costal area suffused with fuscous; a red postmedial line defined on outer side by yellow and with two black points before it on inner area only; a slight pale subterminal line from vein 4 to tornus; a series of black points just before termen; cilia rufous with yellow lines at base and near tips; the underside grey tinged with rufous and thickly irrorated with fuscous, the terminal area suffused with fuscous, a blackish postmedial line.

Hab. N.E. RHODESIA, E. Luangwa distr. (Neare), 1 Q, Kalungwisi distr. (Neare), 1 & type, Bangweolo distr. (Neare), 1 &, 1 Q, Mansya R. (Neare), 1 &. Exp. 26 mm.

MECODINA SUBJECTA Wlk. XXXIII. 1012 (1865).

Congo, Katanga, Kambove; N.E. RHODESIA, Chambezi valley.

GRACILLODES CAFFRA Guen. Noct. iii. p. 370 (1852).

Congo, Lualaba R.; N.E. RHODESIA, E. Luangwa distr., Luangwa valley, N. Luangwa, Mt. Ulungu, Feira, Kalungwisi valley.

Egnasia vicaria Wlk. xxxv. 1972 (1866).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Chambezi valley. 1910.]

ZETHES CONOTYPE, sp. n. (Pl. XXXVIII. fig. 8.)

J. Head, thorax, and abdomen grey mixed with brown, the tibial spurs and tarsi brown ringed with white, the anal tuft whitish. Fore wing grey suffused and irrorated with reddish brown and dark brown; antemedial line indistinct, dark, oblique from costa to median nervure, then inwardly oblique and slightly sinuous; orbicular and reniform white defined by brown, the former small, round, the latter rather bar-shaped; a diffused black medial line, oblique from costa to reniform, then inwardly oblique; postmedial line black slightly defined on outer side by grey, excurved from below costa to vein 4, then oblique; some slight pale points beyond it on costa; subterminal line whitish defined on inner side by fuscous suffusion, minutely dentate: a fine black terminal line. Hind wing grey suffused and irrorated with reddish brown and dark brown; a double diffused black medial line, slightly sinuous postmedial line, indistinct double subterminal line with series of black points beyond it, and fine black terminal line; the underside paler with more blackish irroration, a black and greyish discoidal spot, the lines as above but with no points beyond the subterminal line.

Hab. N.E. RHODESIA, Chinsali distr. (Neave), 1 & type. Exp. 28 mm.

HYPENIN.E.

NODARIA PLANA Swinh. Trans. Ent. Soc. 1890, p. 261.

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

NODARIA EXTERNALIS Guen. Delt. & Pyr. p. 64 (1852).

N.E. RHODESIA, Luangwa valley, Chambezi valley.

NODARIA NODOSALIS Herr.-Schäff. Eur. Schmett. ii. p. 385, Noct. f. 605 (1845).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley; PORTU-GUESE E. AFRICA, Chinde.

NODARIA EXTINCTALIS Zell. Vet. Acad. Handl. 1852, p. 13 (1854). N.E. Rhodesia, Kalungwisi distr.

SIMPLICIA PACHYCERA, sp. n. (Pl. XXXVIII. fig. 9.)

Antennæ of male thickened and fringed with hair at about one-third length; fore tibiæ with sheath enclosing a fringe of hair.

Head and thorax grey-brown tinged with rufous; antennæ with the shaft whitish towards base; legs fuscous; abdomen grey-brown, the anal tuft whitish. Fore wing grey-brown tinged with rufous; faint oblique subbasal and antemedial dark striæ and a slight discoidal lunule; the terminal area brownish white from below apex to tornus where it narrows to a point; a terminal series of brown striæ; cilia brownish white. Hind wing grey-brown; an indistinct diffused subterminal dark line angled

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outwards to termen at vein 2; cilia pale; the underside white tinged and irrorated with brown, a brown discoidal point and indistinct curved postmedial and subterminal lines.

Hab. W. AFRICA (*Dudgeon*), 1 \mathcal{E} , 2 \mathcal{Q} type; N.E. RHODESIA, Kalungwisi distr. (*Neave*), 1 \mathcal{E} . *Exp.* 34-36 mm.

DEINHYPENA LACISTA Holl. Psyche, vii. p. 124, pl. ii. fig. 3 (1894). Congo, Katanga, Kambove.

DEINHYPENA APICATA, sp. n. (Pl. XXXVIII. fig. 35.)

 \bigcirc . (Palpi broken). Head, thorax, and abdomen grey-brown. Fore wing black-brown, the costal area paler; a small white spot at lower angle of cell followed by a point; postmedial line brown placed on a grey band, bent outwards below costa, then oblique; a large quadrate creamy white apical patch extending to below vein 5, with an oblique black bar on it from apex and some blackish spots on termen; cilia chequered black and whitish. Hind wing fuscous brown with a slight pale subterminal line from vein 3 to inner margin; cilia chequered fuscous and whitish; the underside whitish irrorated and suffused with brown and with indistinct curved medial and postmedial lines.

Hab. Congo, Katanga, Kambove (*Neare*), $1 \Leftrightarrow type$. *Exp.* 52 mm.

DICHROMIA LEUCOZONA, sp. n. (Pl. XXXVIII. fig. 27.)

 \circ . Head, thorax, and abdomen grey-brown. Fore wing brown with a leaden grey gloss; a black spot in middle of cell; a white postmedial band defined on outer side by black spots except on costal area, its inner edge oblique and slightly sinuous, its outer oblique to vein 3 and slightly dentate at veins 8, 6, below vein 3 erect and somewhat dentate. Hind wing grey-brown.

Hab. Coxgo, Katanga, Kambove (*Neave*), $1 \Leftrightarrow type$. *Exp.* 40 mm.

HYPENA STRIGATA Fabr. Suppl. Ent. Syst. p. 467 (1798).

N.E. RHODESIA, E. Luangwa distr., Chambezi valley.

HYPENA JUSSALIS Wlk. xvi. 52 (1858).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Chambezi valley, Mpika.

HYPENA VERTICALIS, sp. n. (Pl. XXXVIII. fig. 28.)

 $_{\circ}$. Head, thorax, and abdomen dark brown tinged with grey; palpi white at extreme tips; tarsi ringed with white. Fore wing dark brown tinged with purplish grey; antemedial line indistinct, dark, waved, oblique from costa to above vein 1; a small black spot in middle of cell and slight discoidal lunule; postmedial line black-brown slightly defined on outer side by ochreous grey, minutely waved, oblique from costa to vein 6, then erect, some whitish points beyond it on costa; a subterminal series of small Q. Fore wing with band of grey-white suffusion beyond the postmedial line defined on outer side by a sinuous black line, an oblique dentate black shade from termen below apex.

Ilab. N.E. RHODESIA, E. Luangwa distr. (Neave), 1 3, 1 9 type, N. Luangwa, Mt. Ulungu (Neave), 1 3, Chambezi valley (Neave), 1 9, Tanganyika plateau (Neave), 1 3. Exp. 26-30 mm.

HYPENA TETRASTICTA, sp. n. (Pl. XXXVIII. fig. 29.)

 \mathcal{Q} . Head, thorax, and abdomen grey mixed with reddish brown; tarsi ringed with whitish. Fore wing grey mostly suffused with reddish brown and irrorated with black; two minute black subbasal points below the cell; antemedial line pale defined on outer side by black marks, slightly angled outwards below costa, then oblique to above vein 1 where it is angled outwards; a minute black point in middle of cell and slight discoidal lunule; postmedial line dark brown defined on outer side by ochreous, then by grey suffusion, oblique and almost straight, some black suffusion before it between lower angle of cell and vein 1, the grey beyond it defined by a faint sinuous fuscous line; subterminal line represented by an incurved series of four small dentate black and white marks from below costs to vein 5, then by a faint pale waved line; a grey-white apical patch defined below by an oblique black shade from apex with two dentate marks below it; a terminal series of slight black lunules and two fine lines at base of cilia. Hind wing reddish brown with a dark terminal line; cilia greyish with two fine dark lines at base; the underside reddish brown irrorated with grev.

Ab. 1. Fore wing with the point in cell black and white, a black spot beyond the cell on inner side of postmedial line, the black patch below the cell wedge-shaped and extending to the antemedial line.

Hab. N.E. RHODESIA, N. Luangwa, Mt. Ulungu (Neare), 2 \bigcirc type. Exp. 30 mm.

HYPENA SENIALIS Guen. Delt. & Pyr. p. 30 (1854).

N.E. RHODESIA, Luangwa valley.

HYPENA VARIALIS Wlk. XXXIV. 1132 (1865).

N.E. RHODESIA, Luangwa valley.

HYPENA RECURVATA Hmpsn. Trans. Zool. Soc. xix. p. 116, pl. iv. f. 27 (1909).

N.E. RHODESIA, E. Luangwa distr. PROC. ZOOL, SOC.—1910, NO. XXIX,

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Hypena ecroglauca Hmpsn, Ann. S. Afr. Mus. ii. p. 432 (1902).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, E. Luangwa distr., Chambezi valley, Kalungwisi valley, Lake Bangweolo, Tanganyika plateau, Mansya R.

HYPENA MASURIALIS Guen. Delt. & Pyr. p. 38 (1854).

N.W. RHODESIA, Kapopo; N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Mt. Ulungu, Mansya R.; PORTUGUESE E. AFRICA, Chinde.

HYPENA LIVIDALIS Hühn. Samul. Eur. Schmett., Pyr. ff. 11, 186 (1827).

N.E. RHODESIA, Serenji distr.

HYPENA CONSCITALIS Wlk. XXXIV. 1509 (1865).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, Chambezi valley, Kalungwisi valley.

RHYNCHINA REVOLUTALIS Zell. Vet. Acad. Handl. 1852, p. 10.

N.E. RHODESIA, E. LUANGWA distr.

RHYNCHINA CRASSISQUAMATA, sp. n. (Pl. XXXVIII. fig. 33.)

Q. Head, thorax, and abdomen grey suffused with red-brown; tarsi with slight pale rings. Fore wing grey suffused with cupreous red-brown and slightly invorated with black; antemedial line indistinct, rufous, sinuous; a tuft of raised black and grey scales in middle of cell, and another on discocellulars; postnedial line rufous, angled outwards below costa, then very oblique and defined on inner side by ochreous grey, defined on outer side by tufts of raised black and grey scales and met at lower angle of cell by a very oblique grey streak from apex; subterminal line represented by a series of tufts of raised rufous and grey scales, angled outwards below costa, then oblique and slightly excurved at middle; cilia red-brown, greyish at base and white at tips. Hind wing grey-brown with a cupreous tinge; cilia fuscous brown, grey at tips; the underside whitish tinged with rufous and irrorated with dark brown.

Hab. N.E. RHODESIA, Kalungwisi valley (Neave), 1 Q type. Exp. 28 mm.

RHYNCHINA LEUCODONTA, sp. n. (Pl. XXXVIII. fig. 34.)

 σ . Head, thorax, and abdomen cupreous red-brown, the last with slight pale segmental lines; palpi white below; pectus, legs, and ventral surface of abdomen whitish. Fore wing cupreous red sparsely irrorated with black; antemedial line white, very oblique from costa near base to above vein 1 near postmedial line, then acutely angled inwards on vein 1; a white streak from antemedial line along terminal part of median nervure, obliquely bent upwards on discocellulars; a minute black point in middle of cell; the area between these white markings and an oblique white fascia from costa towards apex to middle of inner margin pale greyish fawn-colour; postmedial line represented by a slight oblique black line from costa to the white fascia, then by an obliquely curved series of slight tufts of raised black scales beyond the white fascia; some white points on postmedial part of costa; slight subterminal black points below veins 8, 7, and 4 and towards inner margin; cilia grey-brown with a white line at base. Hind wing pale cupreous brown, the cilia grey tinged with brown; the underside whitish tinged with cupreous red, a fine dark terminal line.

Hab. N.W. RHODESIA, Alala plateau, Mkushi distr. (Neave), 1 of type. Exp. 26 mm.

NAARDA XANTHONEPHRA, sp. n. (Pl. XXXVIII. fig. 32.)

Q. Head, thorax, and abdomen dark brown irrorated with leaden silvery scales. Fore wing dark brown suffused with leaden silvery scales; antemedial line indistinct, dark, somewhat inwardly oblique and slightly sinuous; an indistinct diffused dark medial line; reniform yellow, narrow, elliptical; postmedial line dark, somewhat diffused and almost evenly curved; a minutely dentate grey-white subterminal line; a terminal series of blackish points. Hind wing brown with a purplish grey gloss; indistinct rather diffused dark medial and postmedial lines, a greyish subterminal line faintly defined on inner side by brown, and a fine blackish terminal line; the underside greyer, a faint dark discoidal striga, rather diffused postmedial line and sinuous grey subterminal line.

Hab. N.E. RHODESIA, upper Luangwa valley (Neave), $1 \circle type$. Exp. 16 mm.

MAGULABA MŒSTALIS Wlk. xxxiv. 1126 (1865). N.E. RHODESIA, upper Luangwa distr.

RH.ESENA SUBCUPRALIS Wlk. xxxiv. 1167 (1865). N.E. Rhodesia, E. Luangwa distr., Luangwa valley.

HYBL.EINÆ.

HYBLÆA FLAVIPICTA, Sp. n. (Pl. XXXVIII. fig. 19.)

Head and thorax olive fuscous mixed with some grey; palpi below, pectus and legs yellow, the mid tarsi above and hind tibiæ and tarsi suffused with scarlet; abdomen blackish with scarlet segmental lines, the anal tuft scarlet, black at tip, the ventral surface scarlet. Fore wing blackish suffused with leaden grey, the costal edge rufous; obliquely placed rounded pale yellow antemedial patches below costa and cell; a small patch of pale yellow scales above middle of inner margin; a large more or less prominent pale yellow patch striated with fuscous from costa

beyond middle to just above tornus, its outer edge obliquely rounded; a minute pale yellow streak on costa just before apex and a patch on cilia below apex. Hind wing with the basal area black-brown with a yellowish streak above vein 1, its outer edge inwardly oblique and irregular to vein 2, then angled outwards to above tornus leaving the inner margin scarlet; the rest of wing yellow becoming deep scarlet before and beyond the black subterminal band which is excurved to vein 3, then bent inwards and oblique to above tornus. Underside of fore wing yellow with scarlet suffusion on costa, a black streak in submedian fold, a black discoidal patch, its inner edge indented at lower angle of cell, its lower extremity connected by a fascia with the curved black subterminal band arising below costa and ending at vein 1; hind wing scarlet with some yellow at base, in submedian interspace and below lower angle of cell, subterminal black patches between vein 3 and submedian fold and below vein 1, and some minute points on apical area.

Hab. CONGO, Katanga, Kambove (Neare), 4 5 type; N.E. RHODESIA, E. Luangwa distr. (Neare), 1 5, 2 9; BR. C. AFRICA, Zomba (Manning), 1 5. Exp. 26-34 mm.

HYBLÆA FLAVIFASCIATA, sp. n. (Pl. XXXVIII. fig. 16.)

J. Head and thorax olive-fuseous tinged with grey; palpi white below at base; pectus and legs yellow, the tufts at extremity of hind tibiæ tinged with scarlet, the tarsi brownish with pale rings; abdomen black-brown with yellow segmental lines, the ventral surface yellow tinged with scarlet. Fore wing blackbrown suffused with olive-grey and some ochreous; faint traces of a sinuous antemedial line; a very ill-defined ochreous grey postmedial band with the faint dark postmedial line on it, obliquely excurved from costa to vein 3, then incurved. Hind wing orange-yellow, the basal area black-brown, with irregularly sinuous outer edge angled outwards below vein 2 to above tornus; a black-brown band, terminal from apex to vein 2, then incurved and leaving a yellow patch on termen; cilia yellow, faintly tinged with scarlet from apex to vein 2. Underside of fore wing orangevellow, the costa and termen tinged with scarlet, medial black points below costa and in cell, a black discoidal patch, its lower extremity connected by a fascia with the broad curved black subterminal band arising below costa; hind wing yellow, the costal area except at base and the terminal area tinged with scarlet, a black discoidal point, two below angle of cell, two in subterminal fold, the outer half of costal area and the terminal area with numerous points and with subterminal patch below vein 2 and terminal patch in submedian interspace.

 \mathcal{Q} . Head, thorax, and abdomen paler grey-brown: fore wing ochreous irrorated and in parts tinged with greyish fuscous, an oblique antemedial striga from discal fold to vein 1, a patch on costa above end of cell and oblique shade from lower angle of cell to inner margin, an oblique streak across apical area; hind wing

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with the postmedial yellow band narrower, the subterminal black band more incurved at submedian fold.

Hab. N.E. RHODESIA, Chambezi valley (Neave), 1 & type, Feira (Neave), 1 & . Exp. & 30, & 32 mm.

HYBLÆA XANTHIA, sp. n. (Pl. XXXVIII, fig. 26.)

J. Head, thorax, and abdomen yellow faintly tinged with rufous; palpi brownish; tarsi brownish with pale rings. Fore wing yellow irrorated and striated with pale rufous; a faint curved rufous medial shade rather darker at costa; a faint oblique shade across apex and blackish apical mark; cilia deep rufous. Hind wing yellow; a diffused black-brown band on termen from apex to vein 3, then incurved and not connected with the spot on termen at vein 1; cilia tinged with rufous from apex to vein 3. Underside of fore wing with the costal and terminal areas tinged with red and irrorated with brown points, a brownish discoidal point; hind wing with the costal area tinged with red except towards base and irrorated with brown points.

Hab. Congo, Katanga, Kambove (Neave), 1 5; N.E. RHODESIA, E. Luangwa distr. (Neave), 1 5, Tanganyika plateau (Neave), 1 5 type. Exp. 24-28 mm.

PTEROTHYSANIDÆ,

HIBRILDES FLAVA Auriv. Trans. Ent. Soc. 1904, p. 697, pl. 33. ff. 5, 6.

N.E. RHODESIA, E. Luangwa distr.

HIBRILDES VENOSA Kirby, A. M. N. H. (6) xviii. p. 388, pl. 19. f. 4 (1896).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley.

HIBRILDES NORAX Druce, P. Z. S. 1887, p. 675 (1888).

CONGO, Katanga, Kambove; N.E. RHODESIA, E. Luangwa distr.

HIBRILDES CRAUSHAYI Butl. A. M. N. H. (6) xviii. p. 162(1896).

Congo, Katanga, Kambove; N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley.

The typical form is fulvous red; in some specimens the basal area of both wings is tinged with fuscous, in another there is a broad oblique ochreous white area beyond the cell of fore wing, in another the fore wing is suffused with fuscous leaving some ochreous white in cell, as streaks on inner area, and as a broad oblique postmedial band, the whole hind wing being suffused with fuscous.

The numerous specimens of *H. norax* and *venosa* are all males, whilst the fifteen specimens of *H. craushayi*, *ansorgei*, and *neavi* are all females. It seems possible that *H. venosa* is a variety of *norax*

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rather yellower with stronger streaks on the veins and an oblique shade across apical area of fore wing, and that *craushayi*, ansorgei, and neavi are all forms of the female, the two former having the terminal band of hind wing narrow; craushayi has the fore wing fulvous, the hind wing with fulvous subterminal spots, ansorgei fuscous, with a broad whitish postmedial band, the hind wing with white subterminal spots, whilst neavi has a very broad terminal band to hind wing, the subterminal spots very small and either white or fulvous. All the forms were taken in one district by Mr. Neave except typical ansorgei, which he did not get, though some of the varieties approach it : the type was taken in the same locality in E. Africa as the type of venosa. On the other hand, H. flava has a female similar to the male.

[Hibrildes craushayi Butler. There is nothing in my experience in the field which would make improbable Sir George Hampson's suggestion that this species and the new *H. neavi* are the females of *H. norax* and *venosa*. Both craushayi and neavi are remarkable Acræine mimics, the former of Acræa natalica Boisd., the latter, with its heavy black margins to the secondaries, of Acræa anemosa Hew.

I found both these species of *Acrae* extremely abundant at Petanke in the Luangwa valley, whence most of the specimens of *craushayi* and *neavi* come. These moths only resemble the large Acraes fairly well on the wing as their flight differs a good deal. At rest, however, the resemblance is remarkable, the moth resting hanging from a grass stem, etc., with wings folded above its back, *exactly* as the *Acrae* does.—S. A. N.]

HIBRILDES NEAVI, sp. n. (Pl. XXXVIII. fig. 18.)

Q. Head, thorax, and abdomen black-brown; frons orange; tegulæ, patagia, and metathorax with small paired white spots; abdomen with subdorsal and lateral series of paired white spots, sublateral orange fascia, and the anal extremity orange. Fore wing fulvous red with some blackish suffusion on basal half, the veins streaked with black; an irregular black discoidal bar, its inner edge concave, its outer somewhat dentate at the veins; the termen and cilia black, expanding into a patch on apical part of costa. Hind wing fulvous red with some blackish suffusion on basal half, the veins finely streaked with black; a black discoidal spot; the terminal area broadly black with minutely waved inner edge and more or less complete subterminal series of small white or orange spots.

Hab. N.W. RHODESIA, Kansanshi (*Neave*), 1 \bigcirc type; N.E. RHODESIA, E. Luangwa distr. (*Neave*), 2 \bigcirc . *Exp.* 60–70 mm.

LYMANTRIADÆ.

VIANA VELUTINA Wlk. Proc. Nat. Hist. Soc. Glasg. i. p. 341 (1869).

Congo, Katanga, Kambove.

PTEREDOA USEBIA Swinh, Trans. Ent. Soc. 1903, p. 382.

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Feira.

PTEREDOA PLUMOSA Hmpsn. Ann. S. Afr. Mus. iii. p. 412 (1905).

N.W. Rhodesia, Alala plateau; N.E. Rhodesia, Chambeži valley, Lake Bangweolo.

REDOA MELANOCRASPIS Hmpsn, Ann. S. Afr. Mus. iii. p. 393 (1905).

N.W. RHODESIA, Kapopo.

NAROMA SIGNIFERA Wlk. vii, 1744 (1856).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley.

BAZIZA PERCULTA Dist. A. M. N. H. (6) xx. p. 201 (1897).

Congo, Katanga, Kambove; N.E. Rhodesia, Chambezi valley, Fort Jameson.

BAZIZA PH.ÆOPHLEBIA, Sp. n. (Pl. XXXVIII. fig. 11.)

 \mathcal{S} . Head, tegulæ, and patagia deep orange; antennæ whitish, the branches brown; thorax ochreous white; palpi, pectus, femora, and abdomen fulvous orange; tibiæ and tarsi ochreous white streaked with black-brown above. Fore wing ochreous white, the veins finely streaked with dark brown. Hind wing pale ochreous, the veins of terminal half finely streaked with dark brown. Underside of both wings with the costal area fulvous orange, the terminal half of fore wing suffused with brown.

Hab. Congo, Katanga, Kambove (Neave), 1 5 type. Exp. 40 mm.

BAZIZA VENATA Swinh, A. M. N. H. (7) xvii. p. 546 (1906).

N.E. RHODESIA, Chambezi valley, Lake Bangweolo, Mansya R.

OLAPA NUDA Holl. Donaldson Smith's Travels, p. 409, pl. fig. 5 (1897).

Congo, Katanga, Kambove; N.W. Rhodesia, Alala plateau; N.E. Rhodesia, E. Luangwa distr., upper Luangwa valley, Chambezi distr., Lake Bangweolo.

OLAPA FLABELLARIA Fabr. Mant. Ins. ii. p. 188 (1787).

Congo, Katanga, Kambove.

OLAPA FULVICEPS, sp. n. (Pl. XXXVIII, fig. 15.)

 \mathcal{S} . Head, thorax, and abdomen white, the head, tegulæ, patagia, and legs strongly tinged with orange fulvous; branches of antennæ pale rufous. Wings uniform hyaline white, the costal and inner areas of fore wing with a faint yellowish tinge, the costal edge pale fulvous.

Hab. Congo, S.E. Katanga (Neave), 3 3 type, Exp. 48 mm,

LELIA PHLEBITIS Hmpsn. Ann. S. Afr. Mus. iii. p. 394 (1905).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley.

LÆLIA ADSPERSA Herr.-Schäff. Aussereur. Schmett. fig. 109 (1854).

CONGO, Katanga, Kambove; N.E. RHODESIA, E. Luangwa distr.

CIMOLA OPALINA Wlk. iv. 817 (1855).

N.W. RHODESIA, Alala plateau.

MARBLA DIVISA Wlk. iv. 815 (1855).

Congo, Katanga, Kambove; N.W. RHODESIA, Kapopo; N.E. RHODESIA, Kalungwisi valley.

Genus LEPTAROA, nov.

Type, L. fulvicolora.

Palpi very short, porrect; eyes small; antenne of male bipectinate with very long branches to apex, of female with shorter branches; build slender; tibiæ with the spurs short, the hind tibiæ with two pairs, the tarsal joints with tufts of hair above. Fore wing short and broad; veins 3 and 5 from near angle of cell; 6 from upper angle; 7, 8, 10 stalked, 9 absent, 10 from towards apex; 11 from cell. Hind wing with veins 3, 4 from angle of cell; 5 from above angle; 6, 7 shortly stalked.

LEPTAROA FULVICOLORA, sp. n. (Pl. XXXVIII. fig. 5.)

 $\mathcal{S} \ \mathcal{Q}$. Head, thorax, and abdomen deep fulvous; antennæ with the branches dark brown. Fore wing deep fulvous; a greyish white, rather diffused, almost straight and erect subbasal line; two similar antemedial lines, the outer rather excurved at middle; two small black spots before the discocellulars and one beyond them; a rather diffused greyish white postmedial line excurved between vein 6 and submedian fold and somewhat bent outwards to inner margin; a slightly waved greyish white subterminal line, incurved below vein 3 and with the area beyond it somewhat darker. Hind wing deep fulvous with rather diffused darker terminal band. Underside fulvous orange; fore wing with blackish discoidal spot, the apical area suffused with fuscous; hind wing with blackish spot at upper angle of cell.

Ab. 1. σ . Both wings orange-yellow with prominent dark brown terminal band.

Ab. 2. σ . Similar, but without the dark terminal band. φ . Yellowish white, the fore wing with the lines defined by orange-yellow.

Hab. CONGO, Katanga, Kambove (Neave), $6 \ \mathcal{E}$, $1 \ \mathcal{Q}$ type, Lualaba R. (Neave), $1 \ \mathcal{E}$; N.E. RHODESIA, E. Luangwa distr. (Neave), $13 \ \mathcal{E}$, $2 \ \mathcal{Q}$, Luangwa valley (Neave), $2 \ \mathcal{E}$, Chinsali distr. (Neave), $2 \ \mathcal{E}$. Exp. 24–34 mm. BRACHAROA QUADRIPUNCTATA Wllgrn. Œfv. Vet.-Ak. Förh. 1875, p. 99.

N.E. RHODESIA, Chambezi valley, Lake Bangweolo.

AROA DISCALIS Wlk. iv. 792 (1855).

Congo, Katanga, Kambove; N.E. RHODESIA, Chinsali distr., Mansya R.

AROA ACHRODISCA, sp. n. (Pl. XXXVIII. fig. 30.)

 δ . Head, thorax, and abdomen fuscous brown mixed with grey; palpi white below except at tips; fore coxæ in front, hind tibiæ and tarsi, and the ventral surface of abdomen whitish. Fore wing fuscous brown mixed with grey and suffused in parts with chocolate-red; a diffused dirty white band beyond the cell from below costa to above tornus, crossed by the slight reddish postmedial line incurved between vein 4 and submedian fold; an indistinct reddish subterminal line faintly defined on outer side by grey, excurved below vein 7 and at middle. Hind wing fuscous brown mixed with grey and faintly tinged with red, the apical area somewhat darker. Underside of fore wing with the band whiter; hind wing greyer with indistinct dark discoidal striga and oblique sinuous postmedial line.

Hab. Congo, Katanga, Kambove (Neave), 1 & type. Exp. 26 mm.

LACIPA QUADRIPUNCTATA Dewitz, Verh. L.-C. Akad. xliii. p. 67, pl. iii. fig. 4 (1881).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, upper Luangwa valley, Bangweolo distr., Mansya R.

LACIPA GEMMATA Dist. A. M. N. H. (6) xx. p. 200 (1897).

N.W. RHODESIA, Alala plateau.

EUPROCTIS SANGUIGUTTA Hmpsn. Ann. S. Afr. Mus. iii. p. 407 (1905).

N.E. RHODESIA, E. Luangwa distr., Petauke distr.

EUPROCTIS STELLATA Dist. A. M. N. H. (6) xx. p. 202 (1897).

N.E. RHODESIA, Chambezi valley.

EUPROCTIS FASCIATA Wlk. iv. 809 (1855).

N.E. RHODESIA, E. Luangwa distr.

EUPROCTIS TORRIDA Dist. A. M. N. H. (6) xx. p. 202 (1897).

N.E. RHODESIA, E. Luangwa distr., Chinsali distr., Kalungwisi valley.

EUPROCTIS NEPHELOPTERA, sp. n. (Pl. XXXVIII. fig. 21.)

 σ . Head, thorax, and abdomen yellow tinged with fulvous; antennæ with the branches brown; palpi with the 3rd joint black

above; fore coxæ with some black: mid and hind tibiæ, the spurs and tarsi banded with black. Fore wing ochreous yellow, the costal area tinged with fulvous, the costal edge black at base; a diffused pale fuscous subbasal shade with minute black points on it from costa to submedian fold; a faint antemedial line, inwardly oblique from below costa to inner margin; medial area suffused with pale fuscous leaving a yellow patch from costa to lower angle of cell where it is slightly angled inwards, the outer edge of the dark area diffused outwards along vein 6, then curved; a subterminal series of small black spots excurved below vein 7 and with faint patches of dark scales beyond them on the veins. Hind wing yellow tinged with brown, the cilia yellow; the underside yellow with diffused brown postmedial shade.

Hab. N.E. RHODESIA, Chambezi valley (Neave), 1 & type. Exp. 32 mm.

EUPROCTIS FULVIPENNIS, sp. n. (Pl. XXXVIII. fig. 31.)

Head and thorax fulvous orange; antennæ with the branches black; palpi with the 3rd joint blackish; anal tuft of female brownish grey. Fore wing fulvous orange; indistinct somewhat diffused and slightly sinuous whitish ante- and postmedial lines. Hind wing uniform fulvous orange.

Hab. N.W. RHODESIA, Kapopo (Neare), 1 & type; N.E. RHODESIA, Kalungwisi valley (Neare), 1 &, 1 &. Exp. & 30, & 34 mm.

NYCTEMERA VARUNÆA Druce, P. Z. S. 1882, p. 780.

Congo, Katanga, Kambove, Lualaba R.

[Nyctemera varunæa Druce.—This large species was not uncommon in Katanga. It is diurnal in its habits and has an extremely powerful flight. It usually flies very straight and at a good speed some 10 or 12 feet from the ground.—S. A. N.]

DASYCHIRA EDDELA Swinh. Trans. Ent. Soc. 1903, p. 494. Congo, Katanga, Kambove; N.W. Rhodesia, Alala plateau.

NUMENES LIBYRA Druce, A. M. N. H. (6) xvii. p. 353 (1896). N.E. Rhodesia, E. Luangwa distr.

HOMOCHIRA RENDALLI Dist. A. M. N. H. (6) xx. p. 203 (1897). N.E. RHODESIA, E. Luangwa distr.

LYMANTRIA FLAVICILIA, sp. n. (Pl. XXXVIII. fig. 14.)

 \mathcal{Q} . Head and thorax brown mixed with greyish; pectus pale; femora crimson above; abdomen crimson with subdorsal series of slight blackish spots and ventral series of black bands, the anal tuft yellowish. Fore wing fuscous brown mixed with some grey; traces of a curved antemedial line; a small black spot on a pale patch in end of cell and an oblique black discoidal lunule; traces 1910.]

of a diffused dark postmedial line defined on outer side by greyish, minutely dentate, excurved from costa to vein 4, then incurved; a very indistinct, dentate, subterminal line, incurved below vein 3 and bent outwards to tornus, the area beyond it greyer; cilia chequered black-brown and yellowish. Hind wing pale greybrown, the inner margin ochreous white; cilia yellow at tips; the underside with slight blackish discoidal point.

Hab. N.E. RHODESIA, E. Luangwa distr., Petauke (Neave), 1 \overline type. Exp. 54 mm.

HETERONYGMIA STRIGITORNA, sp. n. (Pl. XXXVIII. fig. 24.)

 δ . Head and thorax pale reddish brown; antennæ with the shaft whitish, the branches dark brown. Fore wing pale reddish brown with slight blackish discoidal point and traces of a subterminal series of blackish points in the interspaces. Hind wing pale yellowish faintly tinged with red-brown; a blackish bar above tornus; the underside with two blackish discoidal points, a curved postmedial line and subterminal series of slight diffused spots.

Hab. Coxco, Katanga, Kambove (Neave), 1 5 type. Ecp. 52 mm.

HETERONYGMIA LEUCOGYNA, sp. n. (Pl. XXXVIII. fig. 25.)

 \mathcal{S} . Head and thorax pale red-brown; antennæ with the shaft whitish, the branches dark brown; antennæ ochreous white tinged with red-brown. Fore wing pale red-brown; a faint oblique sinuous brown antemedial line; a small black discoidal spot; a faint reddish medial line, angled outwards below costa, then oblique; postmedial line blackish, dentate, slightly incurved below vein 3; traces of a dark subterminal line. Hind wing yellowish white; the underside with blood-red striga at upper angle of cell and traces of a sinuous postmedial line.

 \mathcal{Q} . Head, thorax, and abdomen brownish white; fore wing brownish white, thinly scaled; a faint dark shade before the slight dark antemedial line, which is bent outwards from costa to median nervure, then sinuous; a sinuous dark medial shade; postmedial line very faint, waved, with maculate shade beyond it. Hind wing white, thinly scaled.

Hab. N.E. RHODESIA, E. Luangwa distr., Petauke (Neave), 8 $_{\circ}$, 9 $_{\circ}$ type. Exp. $_{\circ}$ 40, $_{\circ}$ 50–58 mm.

HYPSIDÆ.

DIGAMA AGANAIS Feld. Reis. Nov. pl. 106. fig. 21 (1874). N.W. Rhodesia, Alala plateau.

GEODENA ACCRA Swinh. Trans. Ent. Soc. 1904, p. 149. Congo, Katanga, Kambove.

GEODENA CONIFEBA, sp. n. (Pl. XXXVIII. fig. 12.)

Q. Head, thorax, and abdomen fuscous slightly irrorated with grey, the tegulæ fulvous in front; palpi at base, neck, coxæ, and bases of femora and ventral surface of abdomen yellowish white, the last fulvous at extremity. Fore wing fuscous with a large white patch from subcostal nervure to inner margin extending from close to base to well beyond middle, its outer edge rather irregular; a conical white spot beyond the cell between veins 7 and 5, its upper edge rounded, its lower edge straight. Hind wing white with the terminal area fuscous, its inner edge irregular towards costa, deeply indented between veins 5 and 3 and running inwards on inner margin to near middle.

Hab. Congo, Katanga, Kambove (Neave), $1 \ Q$ type. Exp. 40 mm.

DIOTA FASCIATA Auriv. Ent. Tidskr. 1897, p. 220. N.E. Rhodesia, Kalungwisi valley.

DEILEMERA LEUCONOE Hopff. Monatsb. Akad. Berl. 1857, p. 422.

Congo, Katanga, Kambove, Lualaba R.; N.W. RHODESIA, Kapopo; N.E. RHODESIA, E. Luangwa distr., Chambezi valley, Lake Bangweolo, Tanganyika plateau.

DEILEMERA ITOKINA Auriv. Ark. f. Zool. ii. 4, p. 40 (1904).

Congo, Katanga, Kambove: N.E. RHODESIA, Chambezi valley, Chinsali distr., Lake Bangweolo, Mansya R.

DEILEMERA CHALCOSIDIA, sp. n. (Pl. XXXVIII. fig. 22.)

Q. Head black, the sides of frons white, the base of palpi and head just above and behind the eyes yellowish; thorax white with black stripes on vertex and ratagia and spots on tegule, pectus tinged with yellow at sides, the legs striped black and white; abdomen yellowish white with slight black dorsal striæ on the segments and black ventral bands, the anal tuft orange. Fore wing fuscous brown with a rufous tinge; the basal half semi-hyaline white from below costa to inner margin, with slight dark streaks on the veins and in discal and submedian folds; a semi-hyaline white patch in end of cell bisected by the slight dark streak in discal fold, connected with a rather oblique quadrate patch between lower extremity of cell and submedian fold. Hind wing semi-hyaline yellowish white with black terminal band, broad at costa and narrowing to vein 2 where it terminates.

Hab. Congo, Katanga, Kambove (*Neave*), $1 \Leftrightarrow type$. *Exp.* 44 mm.

ARGINA LEONINA Wlk. XXXI. 262 (1864).

Coxgo, Katanga, Kambove ; N.E. RHODESIA, E. Luangwa distr., N. Luangwa, Mt. Ulungu, Kalungwisi valley, Feira, Tanganyika plateau.

ARGINA AMANDA Boisd. Delegorgue's Voy. Afr. Austr. ii. p. 597 (1847).

Congo, Lualaba R.: N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley, Chambezi distr., Chinsali distr., Petauke distr., Fort Jameson; PORTUGUESE E. AFRICA, Makanga distr.

CALLIORATIS BELLATRIX Dalm. Anal. Ent. p. 50 (1823).

N.E. RHODESIA, Kalungwisi valley.

PHÆGORISTA SIMILIS WIK. Proc. Nat. Hist. Soc. Glasg. i. p. 332, pl. 2. f. 4 (1879).

Congo, Katanga, Kambove.

PHÆGORISTA XANTHOSOMA, sp. n. (Pl. XXXIX. fig. 12.)

 φ . Palpi with the 2nd joint long, oblique, and dilated above at middle, the 3rd joint upturned and very long.

Head and thorax black-brown mixed with yellow and white; palpi yellow below towards base: fore and mid legs with the tibiæ and tarsi brown, hind legs with the spurs and extremities of tarsi brown; abdomen yellow with some white hair at base, a dorsal black patch at base followed by a series of fuscous dorsal bars, sublateral series of black bars. Fore wing black-brown with large triangular white patch between subcostal nervure and vein 1 from base to beyond middle, its outer edge oblique; a large oblique white patch between the cell from vein 7 to submedian fold near termen, its extremities rounded. Hind wing white with terminal black band. Underside of both wings with some yellowish at base.

Hab. N.E. RHODESIA, E. Luangwa distr., Petauke (Neave), 1 \overline type. Exp. 52 mm.

Sphingidæ.

ACHERONTIANÆ.

HERSE CONVOLVULI Linn. Syst. Nat. ed. x. p. 490 (1758).

N.E. RHODESIA, Fort Jameson.

ACHERONTIA ATROPOS Linn. Syst. Nat. ed. x. p. 490 (1758). N.E. Rhodesia, E. Luangwa distr.

AMBULICINÆ.

PLATYSPHINX STIGMATICA Mab. Bull. Soc. Zool. Fr. ii. p. 491 (1878).

N.E. RHODESIA, E. Luangwa distr.

LEUCOPHLEBIA XANTHOPIS, sp. n. (Pl. XXXIX. fig. 15.)

 \mathcal{J} . Palpi and frons crimson-red; head and thorax greyish ochreous tinged with pink, and with the dorsum of thorax redbrown in front with a slight yellow tuft on prothorax and some

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yellow on metathorax; antennæ fulvous; legs purplish pink; abdomen blackish with orange segmental bands, the ventral surface brownish ochreous tinged with pink, the anal tuft ochreous white. Fore wing pale purplish pink, the costal area ochreous white narrowing to apex, the costal edge yellow; a small discoidal ocellus with whitish centre and orange annulus defined by dark brown; an ochreous yellow fascia from base in submedian interspace, at lower angle of cell bent upwards obliquely to below apex and defined above by fuscous brown, its outer edge oblique and dentate on the veins, faintly defined by fuscous, a slight orange streak on it in submedian fold; cilia and the cilia of inner margin ochreous white. Hind wing deep orange, the cilia ochreous white. Underside of fore wing ochreous white faintly tinged with pink and with a large orange patch in, below, and beyond the cell; hind wing ochreous white.

Hab. Congo, S.E. Katanga (Neave), 1 & type. Exp. 56 mm.

POLYPTYCHUS CORYNDONI Roths. Nov. Zool. ix. Suppl. p. 251 (1903).

N.E. RHODESIA, Luangwa valley.

POLYPTYCHUS BAXTERI Roths. Nov. Zool. xv. p. 259 (1908). (Pl. XLI, fig. 14.)

N.E. RHODESIA, E. Luangwa distr.

POLYPTYCHUS NEAVI, sp. n. (Pl. XXXIX. fig. 26.)

 \bigcirc . Head fiery rufous; tegulæ and patagia chocolate-brown, yellowish in front; thorax and abdomen yellowish rufous; palpi yellowish in front. Fore wing yellowish rufous, the veins with slight yellowish streaks, veins 7, 6 defined above by white towards termen; some blackish suffusion on inner margin near base; a small black-brown spot in end of cell with oblique shade from lower angle of cell to inner margin near tornus, its outer edge diffused; an oblique wedge-shaped blackish brown shade from apex to vein 7; cilia fiery rufous. Hind wing deep orange-red with a rather bidentate blackish patch on termen near tornus; cilia whitish at tips. Underside of fore wing orange-red, the terminal area brownish slightly tinged with grey and expanding at costa; hind wing pale orange-red.

Hab. N.E. RHODESIA, E. Luangwa distr., Petauke (*Neave*), $1 \notin \text{type}$. *Exp.* 66 mm.

POLYPTYCHUS NUMOSÆ Wilgrn. Wien. Ent. Mon. iv. p. 42 (1860).

N.E. RHODESIA, upper Luangwa valley.

SESIAN.E.

CEPHONODES HYLAS, Linn. Mant. Plant. p. 539 (1771).

Congo, Katanga, Kambove, Lualaba R.; N.E. RHODESIA,

E. Luangwa distr., upper Luangwa valley, Chinsali distr., Kalungwisi valley, Fort Jameson; S. Rhodesia, Feira; Portuguese E. Africa, Nyanji.

MACROGLOSSINÆ,

NEPHELE VAU Wlk. viii. 197 (1856).

N.E. RHODESIA, Fort Jameson.

NEPHELE COMMA Pffr. Monats. Akad. Wiss. Berlin, p. 421 (1857).

N.E. RHODESIA, E. Luangwa distr., Fort Jameson, Bangweolo distr.

NEPHELE ARGENTIFERA Wlk. viii. 194 (1856).

GERM. E. AFRICA, Dar-es-Salaam.

TEMNORA ELEGANS Roths. Iris, vii. p. 298 (1894); subsp. POLIA Roths. Nov. Zool. xi. p. 437 (1904).

N.E. RHODESIA, Lake Bangweolo, Serenji distr.

MACROGLOSSUM TROCHILUS Hübn, Samml. Ex. Schmett. n. p. 158 (1827).

Congo, Katanga, Kambove; N.E. RHODESIA, Serenji distr., E. Luangwa distr., Chambezi valley, Chinsali distr., Lake Bangweolo, Tanganyika plateau, Mansya R.

LEUCOSTROPHUS HIRUNDO Gerst. Arch. Naturg. xxxvii. p. 360 (1871).

N.E. RHODESIA, Serenji distr., E. Luangwa distr., Petauke distr.; S. RHODESIA, Feira.

PERGESIN.E.

BASIOTHIA MEDEA Fabr. Spec. Ins. ii. p. 143 (1781).

N.E. RHODESIA, Serenji distr., Fort Jameson.

HIPPOTION OSIRIS Dalm. Anal. Entom. p. 48 (1823).

N.E. RHODESIA, E. Luangwa distr.

[*Hippotion osiris* Dalm. As I have pointed out (Proc. Ent. Soc. 1905, p. xxiii), the larva of this species successfully imposes upon the natives by its terrifying appearance. It is one of the few species of Sphingid larvæ that the natives of the Luangwa valley do not eat and consider a delicacy.—S. A. N.]

HIPPOTION CELERIO Linn. Syst. Nat. ed. x. p. 491–1758). N.E. Rhodesia, Serenji distr. HIPPOTION ESON Cram. Pap. Exot. iii. p. 57, pl. 226. fig. C (1779).

Congo, Katanga, Kambove; N.E. RHODESIA, Fort Jameson.

EUPTEROTIDÆ.

ACROJANA SCIRON Druce, P. Z. S. 1887, p. 676 (1888). Congo, Katanga, Kambove.

HOPLOJANA ANÆMICA, sp. n. (Pl. XXXIX. fig. 19.)

 \mathcal{S} . Head, thorax, and abdomen pinkish rufous; shaft of antennæ whitish; palpi, lower part of frons, pectus and legs chocolate-brown. Fore wing very pale pinkish rufous, the long woolly hair at base rather deeper rufous; a slight discoidal spot formed of black scales; a slight inwardly oblique straight rufous line just beyond middle and a similar postmedial line very slightly defined on inner side by whitish. Hind wing very pale pinkish rufous, the long hair on basal inner area rather deeper rufous.

Hab. N.W. RHODESIA, Kapopo (Neave), 1 of type. Exp. 94 mm.

JANA MARIANA White, A. M. N. H. xii. p. 264 (1843).

N.E. RHODESIA, Bangweolo distr.; PORTUGUESE E. AFRICA, Luangwa plain.

PHIALA HOLOGRAMMA Auriv. Trans. Ent. Soc. 1904, p. 697, pl. xxxiii. fig. 7.

Congo, Katanga, Kambove.

PHIALA SIMPLEX Auriv. Trans. Ent. Soc. 1904, p. 695, pl. 33. fig. 1.

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, Mpika.

PHIALA XANTHOSOMA Wilgrn. Wien. Ent. Mon. iv. p. 165 (1860).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, Mansya R.

PHIALA RUBRIVENA, sp. n. (Pl. XXXIX. fig. 23.)

 \mathcal{C} . Head white tinged with yellow; frons bright orange; palpi orange, black on outer sides; antennæ bright rufous, the shaft white; thorax white with a few long black hairs from patagia; pectus, legs, and abdomen orange, with tufts of long white hair from below shoulders, tarsi banded with black, abdomen with sublateral black bars. Fore wing creamy white, the veins strongly streaked with fulvous red except on costal area and the basal half of vein 5. Hind wing white, the veins slightly streaked with fulvous towards termen. Underside of fore wing, except inner area, and the costa of hind wing tinged with fulvous.

Hab. Congo, S.E. Katanga (Neave), 1 & type. Exp. 56 mm.

NOTODONTIDÆ.

SPATALIA ARGYROPHORA, sp. n. (Pl. XXXIX. fig. 14.)

J. Head and thorax brownish grey with some long spatulate scales tipped with fiery red and dark brown; palpi and legs rufous, the tarsi slightly ringed with white; abdomen yellow, ventrally whitish. Fore wing yellow, thickly irrorated with fiery red, the terminal area greyish suffused and irrorated with red-brown, the veins streaked with fiery red except on terminal area; subbasal line double, fiery red with silver spots on and beyond it in submedian interspace; antemedial line double, fiery red filled in with silver spots, sinuous and inwardly oblique; a yellow discoidal bar filled in with fiery red; an oblique sinuous double red line filled in with silver from lower angle of cell to inner margin; postmedial line formed of silver lunules defined by red, arising below costa and incurved below vein 3, with silver spots beyond it between veins 6 and 3, followed by yellow bars defined by red with slight black irroration beyond them; a crenulate deep red subterminal line faintly defined on inner side by whitish : a fine dark terminal line; cilia with deep red line near tips which are white. Hind wing reddish brown, the cilia yellow. Underside of fore wing brown with the costa and termen rufous; hind wing vellowish white suffused with brown.

Hab. Congo, S.E. Katanga (Neave), 1 J type. Exp. 32 mm.

ICHTHYURA FERRUGINEA, sp. n. (Pl. XXXIX. fig. 25.)

 δ . Head, thorax, and abdomen grey-white mixed with ferruginous red; antennæ rufous with the shaft white; palpi in front, pectus, legs, and ventral surface of abdomen whitish. Fore wing ferruginous red, the inner margin lilacine grey; a lilacine grey discoidal spot with whitish striga on it and ill-defined lilacine grey band from it to inner margin: a lilacine grey subterminal band from vein 7 to inner margin, excurved at middle; costa towards apex and cilia lilacine grey. Hind wing ferruginous red, the cilia white except at base; the underside white faintly tinged with ferruginous.

Hab. N.E. RHODESIA, Kalungwisi valley (Neave), 1 3 type, Exp. 38 mm.

RIGEMA ORNATA Wlk. XXXII. 437 (1865).

N.E. RHODESIA, E. LUANGWA distr.; PORTUGUESE E. AFRICA, Chinde.

ZANA GALLANS Karsch, Ent. Nachr. xxi. p. 365, pl. iv. fig. 8 (1895).

N.E. RHODESIA, Petauke distr.

PHALERA LATIPENNIS Butl. P. Z. S. 1896, p. 844, pl. 42. fig. 3.

N.E. RHODESIA, E. Luangwa distr,

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GALONA SERENA Karsch, Ent. Nachr. xxi. p. 363, pl. iii. fig. 1 (1895), d.

Galona pyrrhotricha Karsch, Ent. Nachr. xxi. p. 364, pl. iii. fig. 2 (1895), \mathcal{Q} .

N.E. RHODESIA, E. Luangwa distr., Petauke. 1 σ , 1 φ taken in copula.

GEOMETRIDÆ.

BOARMIANÆ.

PIGIOPSIS CONVERGENS WART. Nov. Zool. vi. p. 301 (1899). N.W. RHODESIA, Kapopo.

STEGANIA DIAGRAMMA, sp. n. (Pl. XXXIX. fig. 13.)

 σ . Head rufous; thorax and abdomen yellow tinged with rufous; fore legs red-brown in front. Fore wing yellow irrorated with rufous, the costa striated with red-brown; a slight red-brown antemedial mark on costa; a nearly straight erect medial red-brown line with a black point on it on costa; a redbrown postmedial line excurved at discal fold where it gives off a streak to termen, and towards tornus where it terminates; a terminal series of blackish points. Hind wing yellow thickly irrorated with rufous; a slightly curved antemedial red-brown line with the black discoidal point just beyond it; a red-brown subterminal line angled outwards to termen at discal fold; a terminal series of slight blackish points. Underside paler; fore wing with the postmedial line dilated at discal fold, but not emitting a streak to termen.

Hab. N.E. RHODESIA, Chambezi valley (Neave), 1 & type. Exp. 22 mm.

STEGANIA GLAUCICHROA, Sp. n. (Pl. XXXIX. fig. 1.)

 \mathcal{S} . Head and neck fiery red, the vertex of head and shaft of antennæ above towards base pure white; thorax and abdomen purplish grey, pectus and ventral surface of abdomen whitish. Fore wing purplish grey into ate with red-brown, the costal edge rufous; a chocolate-brown antemedial line, bent outwards below costa, then waved; a chocolate-brown discoidal bar; postmedial line chocolate-brown, dentate below veins 7, 6, incurved at discal and submedian folds, excurved and slightly dentate between those points; a slight subterminal patch of chocolate-brown suffusion at discal fold; a terminal chocolate-brown line. Hind wing purplish grey thickly irrorated with red-brown; postmedial line chocolate-brown slightly defined on each side by whitish, oblique, sinuous, excurved between veins 4 and 2; a chocolate-brown terminal line; the underside uniform grey-white.

Hab. N.E. Rhodesia, Chambezi valley (Neave), 2 & type. Exp. 26-34 mm. STEGANIA EURYCRASPIS, sp. n. (Pl. XXXIX. fig. 2)

♀. Head, thorax, and abdomen orange-yellow; antennæ brown. Fore wing orange-yellow irrorated with raised silvery scales and a few black scales; the costal edge tinged with rufous; a black discoidal point and traces of a sinuous line from below costa to inner margin; postmedial line double, the inner line hardly traceable, slightly excurved below costa and at middle, the area beyond it bright rufous with slight blackish marks in the interspaces representing the subterminal line and forming a diffused patch above inner margin; a terminal series of black points; cilia blackish and silvery at base, grey at tips. Hind wing orange-yellow irrorated with silvery and a few black scales; a black discoidal point; postmedial line rufous with the area beyond it rufous irrorated with silvery scales; some faint blackish marks in the interspaces representing the subterminal line; cilia blackish and silvery at base, grey at tips; the underside yellow striated with brown especially on terminal area,

Hab. N.E. RHODESIA, Mansya R. (Neave), 1 \bigcirc type. Exp. 34 mm.

SCARDAMIA MACULATA Warr, Nov. Zool, iv. p. 240 (1897).

N.E. RHODESIA, E. Luangwa distr.

HYPERYTHRA LUCICOLOR Butl. A. M. N. H. (4) xvi. p. 417 (1875).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Chambezi valley, Lake Bangweolo distr.

HYPERYTHRA SUBAPICATA Warr, Nov. Zool, vi, p. 308 (1899).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Lake Bangweolo distr.

HYPERYTHRA OLIVATA WARF, Nov. Zool, iv. p. 253 (1897).

N.E. RHODESIA, Luangwa valley.

OSTEODES TURBULENTATA Guen, Ur. & Phal. ii, p. 177 (1857).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, Tanganyika plateau.

MACARIA CRASSATA Warr, Nov. Zool, ix. p. 110 (1902).

Congo, Katanga, Kambove; N.W. RHODESIA, Kapopo.

MACARIA RECTISTRIARIA Herr.-Schäff. Aussereur. Schmett. f. 197 (1854).

Congo, Katanga, Kambove; N.E. Rhodesia, Luangwa valley, Chinsali distr.

MACARIA RHABDOPHORA Holl. Entom. xxv. Suppl. p. 95 (1892). N.E. Rhodesia, Kalungwisi valley, Lake Bangweolo distr.

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MACARIA ZOMBINA Butl. P. Z. S. 1893, p. 683.

Congo, Katanga, Kambove; N.E. RHODESIA, E. Luangwa distr., Mt. Ulungu, Chambezi valley, Kalungwisi valley, Bangweolo distr., Mansya R.

MACARIA JOHNSTONI Butl. P. Z. S. 1893, p. 683.

N.E. RHODESIA, Tanganyika plateau, Chinsali distr.

MACARIA AMANDATA Wlk, xxiii. 922 (1861).

Congo, S.E. Katanga; N.W. RHODESIA, Kapopo; N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Kalungwisi valley.

MACARIA LARGIFICARIA Möschl. Abh. Senck. Ges. xv. p. 95, f. 20 (1889).

N.E. RHODESIA, E. Luangwa distr., Chambezi valley.

MACARIA UNIFILATA Warr. Nov. Zool. vi. p. 307 (1899).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley, Fort Jameson.

MACARIA LATARIA Wlk. xxiii. 921 (1861).

N.E. RHODESIA, Tanganyika plateau.

MACARIA CRASSILIMBARIA Mab. C. R. Soc. Ent. Belg. xxiii. p. 23 (1880).

N.E. RHODESIA, Luangwa valley, Chambezi valley.

MACARIA BRONGUSARIA Wlk. xx. 123 (1860).

Congo, S.E. Katanga; N.E. Rhodesia, E. Luangwa distr., Luangwa valley, Chambezi valley, Tanganyika plateau.

MACARIA TESTACEATA Wlk. xxvi: 1575 (1862).

N.E. RHODESIA, E. Luangwa distr., N. Luangwa, Mt. Ulungu, Chambezi valley.

MACARIA MAJESTICA Warr. Nov. Zool. viii. p. 213 (1901).

Congo, Katanga, Kambove; N.E. RHODESIA, Luangwa valley, N. Luangwa, Mt. Ulungu, Bangweolo distr.

TEPHRINA PRESBITARIA Swinh. Trans. Ent. Soc. 1904, p. 511. N.E. Rhodesia, Luangwa valley.

TEPHRINA DEERARIA Wlk. xxiii. 962 (1861).

N.E. RHODESIA, Luangwa valley.

TEPHRINA EXOSPILATA Wlk. xxiii. 987 (1861).

N.E. RHODESIA, N. Luangwa, Mt. Ulungu, Lake Bangweolo distr.

TEPHRINA CATALAUNARIA Guen. Ur. & Phal. ii. p. 108 (1857).

N.E. RHODESIA, Chambezi valley, Bangweolo distr.

TEPHRINA CINERESCENS Butl. A. M. N. H. (4) xvi. p. 418 (1875).

N.W. RHODESIA, Kafue valley; N.E. RHODESIA, Chambezi valley.

TEPHRINA FURCATA Warr. Nov. Zool. iv. p. 112 (1897).

N.E. RHODESIA, Luangwa valley.

TEPHRINA INCONSPICUA Warr. Nov. Zool, iv. p. 113 (1897).

N.E. RHODESIA, Luangwa valley.

TEPHRINA OCHRICILIATA Warr, Nov. Zool. viii. p. 214 (1901).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, E. Luangwa distr.

TEPHRINA OBSERVATA Wlk. xxiii. 963 (1861).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Lake Bangweolo distr.

TEPHRINA ARCIFERA, sp. n. (Pl. XXXIX. fig. 3.)

J. Head, thorax, and abdomen pale yellow; antennæ brownish. Fore wing pale yellow striated with brown; a blackish antemedial point in lower part of cell and discoidal point; the costa black towards apex; postmedial line olive-brown defined on inner side by clear yellow and on outer by dark brown, arising from termen just below apex and obliquely incurved, the area beyond it tinged with purplish brown; some black points on termen from apex to vein 5; cilia blackish at tips towards apex. Hind wing pale yellow striated with brown; a brown discoidal bar; postmedial line olive-brown defined on inner side by clear yellow and on outer by dark brown, some purplish-grey suffusion beyond it towards costa; cilia whitish at tips. Underside of both wings yellow, the brown striæ strong, thickly disposed on basal half, black discoidal bars; fore wing with the postmedial line formed of blackish marks, forking below vein 4 and not extending below submedian fold; hind wing with the postmedial line formed by a double series of blackish marks, coalescing towards costa.

Hab. N.E. RHODESIA, Bangweolo distr. (Neave), 1 & type. Exp. 30 mm.

ZAMARADA RUFILINEARIA Swinh. Trans. Ent. Soc. 1904, p. 516. N.E. Rhodesia, E. Luangwa distr., Luangwa valley.

ZAMARADA DENTICINCTA, sp. n. (Pl. XXXIX. fig. 6.)

3. Head, thorax, and abdomen rufous mixed with grey; antennæ dark brown. Fore wing semihyaline yellow with a

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pearly gloss; the costa orange sparsely striated with black, a black discoidal point; postmedial line black slightly defined on outer side by silvery grey, not quite reaching costa, waved, excurved at middle and incurved from above vein 2; the terminal area grey-brown striated with fuscous; a silvery subterminal line defined on inner side by black-brown, dentate towards costa, waved below vein 5 and incurved below vein 2; a fine black terminal line and fine silvery line at base of cilia. Hind wing semihyaline yellow with a pearly gloss; postmedial line black defined on outer side by silvery grey, sinuous, excurved between veins 5 and 2; terminal area grey-brown striated with fuscous; a silvery subterminal line defined on inner side by black-brown especially towards costa and tornus, interrupted by black-brown at discal fold, waved towards costa, then slightly sinuous; a fine black terminal line and fine silvery line at base of cilia.

Hab. N.E. RHODESIA, E. Luangwa distr. (Neave), 3 & type, Chambezi valley (Neave), 1 &; TRANSVAAL, White R. (Cooke), 1 &. Exp. 30-34 mm.

ZAMARADA CHRYSOTHYRA Hmpsn. Trans. Zool. Soc. xix. p. 122, pl. iv. f. 50 (1909).

N.E. RHODESIA, E. Luangwa distr., Chambezi valley.

ZAMARADA FLAVICOSTA Warr. Nov. Zool. iv. p. 122 (1897). N.E. Rhodesia, E. Luangwa distr., Luangwa valley.

ZAMARADA FLAVICAPUT Warr. Nov. Zool. viii. p. 212 (1901). N.E. Rhodesia, E. Luangwa distr.

ZAMARADA PYROCINCTA, sp. n. (Pl. XXXIX. fig. 5.)

Head, thorax, and abdomen rufous mixed with grey and slightly irrorated with black; antennæ with the branches blackish; ventral surface of abdomen grey. Fore wing semihyaline vellow with a pearly gloss; the costa ochroous striated with black; a black discoidal spot; postmedial line black, not quite reaching costa, towards which it is slightly waved, excurved between veins 4 and 2; terminal area bright rufous irrorated with black; a silvery subterminal line defined on inner side by fiery red and by a slight black spot below costa, dentate to vein 5, then waved, incurved below vein 2; a series of black points at base of cilia. Hind wing semihyaline yellow with a pearly gloss, the inner area slightly striated with fuscous; a black discoidal point; postmedial line black, excurved below vein 7 and between veins 4 and 2; terminal area bright rufous irrorated with black; a silvery subterminal line defined on inner side by fiery red, waved towards costa; a series of black points at base of cilia.

Ab. 1. Head, thorax, and abdomen, terminal area of both wings and costa of fore wing much redder; both wings with the discoidal points red, the postmedial line red slightly defined on outer side by silver; the costa of fore wing and terminal area of both wings with hardly a trace of black irroration; a fine red terminal line and no black points at base of cilia.

Hab. Congo, Katanga, Kambove (Neave), 3 \mathcal{J} type; N.E. RHODESIA, E. Luangwa distr. (Neave), 11 \mathcal{J} , 6 \mathcal{Q} , Chambezi valley (Neave), 2 \mathcal{J} , 1 \mathcal{Q} , Bangweolo distr. (Neave), 1 \mathcal{Q} , Mansya R. (Neave), 1 \mathcal{Q} . Exp. 24–32 mm.

ZAMARADA FLAVICINCTA, sp. n. (Pl. XXXIX. fig. 4.)

J. Head, thorax, and abdomen fiery red mixed with grey and irrorated with black; antennæ with the branches blackish; ventral surface of abdomen pale. Fore wing semihyaline yellow with a pearly gloss and some fuscous striæ on median nervure and inner margin, the costal area yellow tinged with fiery red and striated with black; a small black discoidal spot; postmedial line black defined on outer side by silvery scales, not quite reaching costa, minutely waved, strongly excurved between veins 4 and 2, then bent inwards; terminal area yellow suffused with fiery red and irrorated with black; a dentate silvery subterminal line defined on inner side by yellow; a series of small black spots at base of cilia. Hind wing semihyaline yellow with a pearly gloss and slightly striated with blackish; a small black discoidal spot; postmedial line black defined on outer side by silvery scales, excurved below vein 7, excurved and somewhat dentate between veins 4 and 2; terminal area yellow suffused with fiery red and irrorated with black; a waved silvery subterminal line defined on inner side by yellow; a series of small black spots at base of cilia,

Q. Wings more thickly striated with black, the postmedial line with some fuscous suffusion beyond it.

Ab. 1. Both wings with diffused rufous discoidal spots, the postmedial line red-brown.—Nigeria.

Hab. S. NIGERIA, Abutshi (Newman), $1 \leq ;$ N.E. RHODESIA N. Luangwa, Mt. Ulungu (Neare), $4 \leq ,$ E. Luangwa distr. (Neave), $2 \leq$ type, Chambezi valley (Neave), $1 \leq , 1 \leq ;$ MASHONA-LAND, Salisbury (Marshall), $2 \leq .$ Exp. 26 mm.

HYPHENOPHORA ÆMONA Swinh. Trans. Ent. Soc. 1904, p. 498. N.E. Rhodesia, Kalungwisi valley.

NASSUNIA PETAVIA Stoll, Pap. Exot. iv. p. 111, pl. 347. f. F (1783).

N.W. RHODESIA, Alala plateau.

CœNINA PŒCILARIA Herr.-Schäff. Aussereur. Schmett. ff. 192, 193 (1854).

N.W. RHODESIA, Alala plateau; N.E. Rhodesia, E. Luangwa distr., Chambezi valley.

H.EMATORITHRA RUBRIFASCIATA Butl. A. M. N. H. (6) xviii. p. 106 (1896).

N.E. RHODESIA, E. Luangwa distr.; PORTUGUESE E. AFRICA, S. Angoniland.

PSILOCEREA CRASPIGONIA Hmpsn. Trans. Zool. Soc. xix. p. 124, pl. iv. f. 55 (1909).

N.W. RHODESIA, Alala plateau.

MESOCCELA RUFESCENS, sp. n. (Pl. XXXIX. fig. 9.)

 \mathcal{S} . Head, thorax, and abdomen ochreous tinged with rufous; antennæ brown; fore and mid tibiæ blackish at extremities. Fore wing ochreous suffused with rufous; some dark striæ on costa; a medial line oblique and dark from costa to vein 6 just beyond the cell, then inwardly oblique and hardly traceable; a dark postmedial spot on costa with curved series of three points below it; an oblique dark line from costa just before apex, towards which it is somewhat diffused, to inner margin; cilia dark at tips except towards tornus. Hind wing ochreous suffused with rufous except on basal and costal areas; an indistinct dark antemedial line; a curved dark postmedial line with series of black points before it; the underside striated with brown, the kines more distinct, the antemedial line excurved at middle.

 \Diamond . Wings pale ochroous irrorated and striated with red-brown, the lines more distinct and diffused; fore wing with antemedial line angled outwards on median nervure, then oblique; the medial line diffused and sinuous from vein 6 to inner margin, the postmedial line with rufous suffusion beyond it; a pale sub-apical lunule.

Hab. N.E. RHODESIA, Luangwa valley (*Neave*), 11 \mathcal{J} , 2 \mathcal{Q} type. *Exp.*, \mathcal{J} 42, \mathcal{Q} 44 mm.

MESOCOELA FLAVIMACULA, sp. n. (Pl. XXXIX. fig. 8.)

 σ . Head, thorax, and abdomen purplish grey-brown; antennæ dark brown. Fore wing purplish grey-brown with slight dark irroration; a black discoidal point placed on an oblique diffused fuscous patch from costa and with traces of an oblique dark line from it to inner margin; a slight dentate whitish postmedial line with black suffusion before it towards costa, oblique below vein 6 and with series of black points on it, some black beyond it between veins 7, 6, followed by an ochreous white lunule before the slight curved brown subterminal line defined on outer side by white towards costa. Hind wing purplish grey-brown with slight dark irroration; an indistinct oblique rather diffused dark antemedial line; a black discoidal point; traces of a curved postmedial line with series of slight black points on it; the underside greyer sparsely striated with brown, a black discoidal point and traces of a curved postmedial series of black points.

Hab. N.É. RHODESIA, Luangwa valley (Neare), 1 & type. Exp. 38 mm. CHORODNODES ROTHI Warr. Nov. Zool. iv. p. 105 (1897).

Congo, Katanga, Kambove; N.W. Rhodesia, Kapopo.

BOARMIA ACACIARIA Boisd. Faun. Ent. Madag. p. 116, pl. 16. f. 4 (1834).

Congo, Katanga, Kambove.

BOARMIA PALLIDIZONA, sp. n. (Pl. XXXIX, fig. 7.)

Antennæ of male pectinate; hind tibiæ not dilated; fore wing with fovea.

d. Head, thorax, and abdomen brownish grey mixed with black; pectus and ventral surface of abdomen whitish. Fore wing brownish grey thickly irrorated and striated with black, the costa yellowish; an oblique whitish band beyond the medial line extending to just beyond the postmedial line; subbasal line represented by black points on costa and median nervure; antemedial line indistinct, black; curved; a small black discoidal spot; medial line black, oblique, slightly excurved from costa to submedian fold; postmedial line indistinct, punctiform, oblique below vein 4; subterminal line represented by two black marks on costa and an incurved line from vein 4 to inner margin; a terminal series of black striæ; cilia whitish intersected with black. Hind wing brownish grey thickly irrorated and striated with black, an oblique whitish band beyond the medial line extending to just beyond the postmedial line; medial line black, slightly excurved at median nervure; a small black discoidal spot; a slight punctiform postmedial line; traces of a pale waved subterminal line; a lunulate black terminal line. Underside paler with fuscous suffusion beyond the oblique white band on both wings.

Hab. N.E. RHODESIA, E. Luangwa distr. (Neave), $1 \leq$; MASHO-NALAND, Salisbury (Marshall), $1 \leq$ type. Exp. 30 mm.

BOARMIA (HEMEROPHILA) ACYGONIA, Sp. n. (Pl. XXXIX. fig. 37.)

 \mathcal{S} . Head and thorax red-brown mixed with whitish; palpi and frons dark brown; antennæ with the branches black; abdomen whitish irrorated with brown and dorsally tinged with red-brown. Fore wing whitish, the basal area suffused with red-brown and irrorated with black, bounded by the black antemedial line which is erect to submedian fold, then bent inwards to inner margin; medial area slightly striated with brown, the costa with black striæ; postmedial line black, obliquely incurved from costa to vein 5, where it is acutely angled inwards, then again incurved, the area beyond it suffused with red-brown and irrorated with black except a patch below apex; some black striæ on apical part of costa and a diffused black mark from termen to the angle of postmedial line : a terminal series of black lunules. Hind wing whitish tinged with rufous and slightly irrorated with black; postmedial line black, excurved between veins 6 and 5, then incurved; a maculate whitish subterminal band from above vein 6 to tornus; a waved black terminal line; the underside silky white slightly irrorated with brown, a brown discoidal spot, the postmedial line indistinct.

Hab. N.E. RHODESIA, Bangweolo distr. (Neave), 1 & type. Exp. 46 mm.

BOARMIA SUBAURATA Warr. Nov. Zool. vi. p. 306 (1899).

Congo, Katanga, Kambove; N.E. RHODESIA, Bangweolo distr.

BOARMIA NIGRIPUNCTATA Warr. Nov. Zool. iv. p. 93 (1897).

N.E. RHODESIA, Chambezi valley, Lake Bangweolo distr.

NOTHABRAXAS SIMPLEX Warr, Nov. Zool. iv. p. 89 (1897).

CONGO, Katanga, Kambove; N.E. RHODESIA, Mansya R.

PITTHEA CONTINUA Wlk. ii. 463 (1854).

Congo, Katanga, Kambove.

PITTHEA FAMULA Drury, Ill. Exot. Ins. ii. p. 19, pl. 11. f. 3 (1782).

N.E. RHODESIA, Kalungwisi valley.

TERINA PUNCTICORPUS Warr. Nov. Zool. iv. p. 240 (1897).

N.E. RHODESIA, Chambezi valley, Lake Bangweolo distr.

TERINA INTERNATA Warr. Nov. Zool. xvi. p. 118 (1909).

Congo, Katanga, Kambove, Lualaba R.

TERINA CROCEA, sp. n. (Pl. XXXIX. fig. 36.)

Head, thorax, and abdomen black; frons with white bar; shoulders with small yellow spots; pectus at sides with white spots; legs streaked with white; abdomen with dorsal, lateral, and sublateral series of small white spots. Fore wing black; a white point at base; a yellow patch extending from close to base below costa to middle and on inner margin to near tornus, its outer edge obliquely curved; an oblique elliptical yellow patch across apical area from or from just below costa to near termen below vein 3. Hind wing orange-yellow, the inner margin narrowly black; a terminal black band expanding on apical area and towards tornus. Underside of fore wing of male with the retinaculum white.

Hab. Congo, Lualaba R. (Neave), $1 \leq$ type; N.W. Rhodesia, Alala plateau (Neave), $1 \Leftrightarrow Exp. \Leftrightarrow 38, \Leftrightarrow 36$ mm.

ALETIS HELCITA Clerck, Icones, pl. 39. f. 4 (1764).

Congo, Katanga, Kambove.

ALETIS MONTEIRONIS Druce, Ent. Mo. Mag. xx. p. 156 (1883). Congo, Katanga, Kambove. ANNEMOPSYCHE CHARMIONE Fabr. Ent. Syst. iii. (1) p. 205 (1793).

Congo, Lualaba R.

HVLEMERA OCTOGESA Druce, P. Z. S. 1887, p. 672, pl. 55. f. 1 (1888).

Congo, Katanga, Kambove.

HVLEMERA NEÆRA Druce, P. Z. S. 1887, p. 672 (1888).

Congo, Katanga, Kambove.

Geometrinæ.

THALASSODES NIGRIPUNCTATA Warr. Nov. Zool. iv. p. 46 (1897). N.W. RHODESIA, Alala plateau; N.E. Rhodesia, Chambezi valley.

PRASINOCYMA VERMICULARIA Guen. Ur. & Phal. i. p. 359 (1857). N.E. Rhodesia, E. Luangwa distr.

PRASINOCYMA RHODOCERA, sp. n. (Pl. XXXIX. fig. 29.)

Q. Head, thorax, and abdomen green; palpi, frons, and antennæ deep blood-red; abdominal crests red; pectus and ventral surface of abdomen yellowish white, the legs red. Fore wing emeraldgreen striated with white; the costa yellowish white; the cilia yellowish white tinged with blood-red at tips. Hind wing emerald-green striated with white; cilia yellowish white tinged with blood-red at tips; the underside greenish white.

Hab. N.W. RHODESIA, Alala plateau (Neave), $1 \circlearrowright$ type. Exp. 34 mm.

AGRAPTOCHLORA DILATATA Wlk. xxi. 594 (1860).

N.W. RHODESIA, Alala plateau.

HEMITHEA ALBISTRIGULATA WART. Nov. Zool. iv. p. 39 (1897). N.E. RHODESIA, E. Luangwa distr.

NEMORIA UNILINEA Warr. Nov. Zool. iv. p. 40 (1897).

N.E. RHODESIA, upper Luangwa valley, E. Luangwa distr.

COMIBÆNA LEUCOSPILATA Wlk. XXVI. 1554 (1862).

N.E. RHODESIA, E. Luangwa distr.

Comibæna rhodosticta, sp. n. (Pl. XXXIX. fig. 30.)

Head, thorax, and abdomen green mixed with some deep bloodred; palpi red, white at tips; frons red, white below; antennæ white; pectus and ventral surface of abdomen white; legs bloodred. Fore wing emerald-green thickly striated with white; the costa white with a blood-red streak below it; a blood-red discoidal spot and postmedial patch between veins 3 and 2 varying in size; some white on termen and a fine blood-red terminal line; cilia white intersected by blood-red streaks. Hind wing emeraldgreen thickly striated with white; a blood-red discoidal spot; some white on termen and a fine blood-red terminal line; cilia white intersected with red; the underside greenish white.

Hab. N.E. RHODESIA, E. Luangwa distr. (*Neare*), $3 \triangleleft$, $4 \updownarrow$ type; MASHONALAND (*Dobbie*), $1 \updownarrow$. *Exp.* \triangleleft 30, \wp 38 mm.

NEUROTOCA ENDORHODA, sp. n. (Pl. XXXIX, fig. 31.)

 \mathcal{S} . Head white, the antennæ with some deep blood-red; thorax green with blood-red patch on prothorax; abdomen deep blood-red, green at extremity. Fore wing emerald-green; the costal area white; a curved white antemedial line; postmedial line white, oblique; cilia white. Hind wing emerald-green with deep blood-red patch on middle of inner margin; an oblique white medial line; cilia white; the underside greyish white.

Hab. N.E. RHODESIA, Fort Jameson (Neave), 1 3 type. Exp. 30 mm.

ACOLLESIS TRILINEATA, sp. n. (Pl. XXXIX, fig. 32.)

Head, thorax, and abdomen emerald-green; palpi and frons blood-red; antennæ white with the branches blood-red; legs blood-red. Fore wing emerald-green; the costa narrowly white; a fine oblique white antemedial line not quite reaching costa; a stronger oblique white postmedial line not reaching costa; a fine white subterminal line not reaching costa or inner margin; cilia white at tips. Hind wing emerald-green with strong minutely waved white postmedial line and slight minutely waved white subterminal line; cilia white at tips.

Hab. N.W. RHODESIA, Alala plateau (Neare), 2σ type, Lake Bangweolo (Neare), 1σ , Tanganyika plateau (Neare), 1φ ; MASHONALAND (Dobbie), 1φ . Exp. $\sigma 26$, $\varphi 28$ mm.

Collesis Minica Warr, Nov. Zool. iv. p. 37 (1897). N.E. Rhodesia, E. Luangwa distr.

AIDALIANÆ.

EPHVRA ANANDARIA Swinh. Trans. Ent. Soc. 1904, p. 461. N.E. Rhodesia, E. Luangwa distr.

ANISODES INÆQUALIS Warr. Nov. Zool. ix. p. 501 (1902). N.E. RHODESIA, Chambezi valley.

ERYTHROLOPHA TRISINUATA Warr. Nov. Zool. ix. p. 56 (1897).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Chambezi valley.

TIMANDRA RUFA Warr. Nov. Zool. iv. p. 65 (1897).

N.E. RHODESIA, E. Luangwa distr.

TIMANDRA NEPTUNARIA Guen. Ur. & Phal. ii. p. 3, pl. 18. f. 5 (1857).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley; Portuguese E. Africa, Chinde.

TIMANDRA NIGRIPUNCTA Warr. Nov. Zoel. iv. p. 225 (1897). N.E. Rhodesia, upper Luangwa valley, Chinsali distr.

TIMANDRA GLAUCA Warr, Nov. Zool. iv. p. 64 (1897).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Bangweolo distr.

TRYGODES DENTILINEA WART. Nov. Zool. iv. p. 47 (1897). N.E. Rhodesia, Lake Bangweolo.

PROBLEPSIS VESTALIS Butl. A. M. N. H. (4) xvi. p. 419 (1875). N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

INDUNA RUFISALSA Warr. Nov. Zool. iv. p. 368 (1897). N.E. RHODESIA, Luangwa valley.

INDUNA CURVIMARGO Wair. Nov. Zool. viii. p. 92 (1900).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Chambezi valley.

INDUNA NUBICINCTA, sp. n. (Pl. XXXIX, fig. 24.)

J. Head, thorax, and abdomen ochreous white slightly tinged with reddish brown; palpi at tips and frons black; fore and mid legs fuscous in front. Fore wing pale ochreous slightly irrorated with reddish brown; antemedial line reddish brown, oblique from costa to middle of cell, then incurved; a black discoidal striga; medial line reddish brown, oblique from costa to vein 6, then inwardly oblique and sinuous; postmedial line reddish brown, excurved below costa, then oblique and sinuous, the area beyond it suffused with red-brown except at apex; a slight waved subterminal shade bent outwards to termen below apex; a fine brown terminal line and a line near tips of cilia. Hind wing pale . ochreous irrorated with reddish brown, the terminal area suffused with red-brown; a reddish-brown medial line slightly excurved at middle; a black discoidal point; postmedial line reddish brown, excurved and slightly sinuous; a faint sinuous subterminal shade; a fine brown terminal line; the underside ochreous white slightly irrorated with brown, a black discoidal point and sinuous excurved postmedial line.

Hab. N.E. RHODESIA, E. Luangwa distr., Mbala country (Neave), 1 S type. Exp. 30 mm.

CRASPEDIA DESERTA Warr. Nov. Zool. iv. p. 51 (1897).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley, Chambezi valley.

CRASPEDIA TRICOMMATA WART. Nov. Zool. vi. p. 294 (1899). N.E. Rhodesia, Chambezi valley.

CRASPEDIA INTERNATA Guen. Ur. & Phal. i. p. 506 (1857).

N.E. RHODESIA, E. Luangwa distr.

CRASPEDIA PULVEROSARIA Wlk. XXVI. 1605 (1862).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

CRASPEDIA DIFFUSIZONA, sp. n. (Pl. XXXIX. fig. 34.)

Head, thorax, and abdomen pale ochreous tinged with reddish brown and irrorated with black; palpi blackish at tips; frons red-brown. Fore wing pale ochreous irrorated with black; a faint diffused curved brown antemedial line; a black discoidal point; postmedial line brown, oblique from costa to vein 6, incurved at discal fold, angled outwards below vein 4, then incurved, a diffused fuscous-brown band beyond it, bent out to termen below apex and strongest at discal fold and below vein 3; a fine punctiform black terminal line. Hind wing pale ochreous irrorated with black; a diffused brown antemedial line; a black discoidal point; postmedial line brown, excurved at middle and with a diffused reddish-brown band beyond it; a fine punctiform black terminal line; the underside pale ochreous irrorated with black, a black discoidal point and sinuous brown postmedial line.

Hab. BR. E. AFRICA, Njoro (*Cholmley*), 1 \bigcirc ; N.E. RHODESIA, Chambezi valley (*Neave*), 1 \eth type. *Exp.* \eth 28, \bigcirc 32 mm.

CRASPEDIA GLAUCOCYMA, sp. n. (Pl. XXXIX. fig. 33.)

Head, thorax, and abdomen white tinged with olive-brown; frons black. Fore wing white irrorated with a few black scales; the basal area with two faint oblique diffused olive bands from below costa to inner margin; antemedial line pale olive, diffused, oblique from costa to middle of cell, then inwardly oblique; a black discoidal point; medial line pale olive, rather diffused, excurved below costa, then oblique, sinuous; two oblique sinuous pale olive postmedial bands; a slight waved pale olive subterminal shade; a terminal series of black points. Hind wing white irrorated with a few black scales; a diffused oblique pale olive medial line; a black discoidal point; a diffused oblique pale olive medial band; a diffused waved pale olive postmedial band and waved subterminal shade; a terminal series of black points; the underside white with black discoidal point and terminal series of points.

Hab. N.E. RHODESIA, Chambezi valley (*Neare*), $1 \circ \sigma$, $2 \circ \varphi$ type; MASHONALAND, Salisbury (*Marshall*), $3 \circ \sigma$, $3 \circ \varphi$. *Exp.* 20–26 mm.

CRASPEDIA SINCERA WART. Nov. Zool. viii, p. 208 (1901). N.E. RHODESIA, E. Luangwa distr.

CRASPEDIA ARGYROLEUCA, sp. n. (Pl. XXXIX. fig. 35.)

Head, thorax, and abdomen white tinged in parts with brown and slightly irrorated with black; palpi at tips and frons black; neck reddish brown; legs tinged with reddish brown, the fore legs blackish in front. Fore wing silvery white irrorated with a few black scales, the costa tinged with reddish brown; a faint sinuous brown medial line; postmedial line reddish brown, oblique, waved; a terminal series of prominent black points. Hind wing silvery white sparsely irrorated with black scales; a black discoidal point, waved brown postmedial line, and terminal series of black points; the underside silvery white with terminal series of black points.

Hab. Br. E. AFRICA, Mtebe (Ansorge), 1 ♀; N.W. RHODESIA, Alala plateau (Neave), 1 ♂ type. Exp. 30 mm.

CRASPEDIA LÆVIPENNIS Warr. Nov. Zool. iv. p. 52 (1897). N.W. Rhodesia, Alala plateau.

CRASPEDIA INTERNATARIA Wlk. xxii. 746 (1861).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Chambezi valley, Chinsali distr.

CRASPEDIA SPOLIATA Wlk. xxii. 744 (1861).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, E. Luangwa distr., Luangwa valley, Chambezi valley, Chinsali distr., Lake Bangweolo distr., Tanganyika plateau.

CRASPEDIA LACTARIA Wlk. XXVI. 744 (1861).

N.E. RHODESIA, E. Luangwa distr., upper Luangwa valley, Kalungwisi Valley, Lake Bangweolo distr.

CRASPEDIA OPICATA Fabr. Ent. Syst. Suppl. p. 457 (1794).

N.E. RHODESIA, E. Luangwa distr.

LARENTIANÆ.

STERRHA SACRARIA Linn. Syst. Nat. i. (2) p. 863 (1759).

Congo, Katanga, Kambove; N.E. Rhodesia, Luangwa valley, Chambezi valley, Kalungwisi valley, Chinsali distr., Mansya R.; Portuguese E. Africa, S. Angoniland.

ŒNOCHROMINÆ.

AFROPHYLA VETHI Snell. Tijd. v. Ent. xxix. p. 139 (1886). N.E. Rhodesia, E. Luangwa distr., Luangwa valley.

ORTHOSTIXIN.E.

ALEX CONSCITARIA Wlk. XXXIII. 986 (1861).

N.W. RHODESIA, Kapopo; N.E. RHODESIA, Luangwa valley, Chambezi valley, Kalungwisi valley, Lake Bangweolo distr., Tanganyika plateau, Mansya R.

Ozola pulverulenta Warr. Nov. Zool. iv. p. 30 (1897). N.E. Rhodesia, Luangwa valley.

SATURNIADÆ.

NUDAURELIA ZAMBESINA Wlk. XXXII. 523 (1865). N.E. RHODESIA, E. Luangwa distr.

NUDĄURELIA JACKSONI Roths. Nov. Zool. xv. p. 255 (1908). N.W. Rhodesia, Alala plateau.

COPAXA DENTIFERA MSSN. Beitr. Schmett. v. f. 115 (1886). N.E. Rhodesia, E. Luangwa distr.

COPAXA HANNINGTONI Butl. A. M. N. H. (5) xii. p. 106 (1883). N.E. Rhodesia, E. Luangwa distr.

IMBRASIA EPIMETHEA Drury, Ill. Exot. Ent. ii. pl. 13. f. 1 (1773).

Congo, Katanga, Kambove.

GONIMBRASIA PYGMÆA MSSN. Beitr. Schmett. v. f. 100 (1886). N.E. Rhodesia, E. Luangwa distr.

GONIMBRASIA IRIUS Fabr. Ent. Syst. iii. (1) p. 409 (1793). CONGO, Katanga, Kambove.

GONIMBRASIA TYRRHENA Westw. Proc. Zool. Soc. 1849, p. 51. N.E. Rhodesia, E. Luangwa distr.

GYNANISA MAIA Klug, Neue Schmett. pl. 5. f. 1 (1836). Congo, Katanga, Kambove.

GYNANISA ISIS Westw. Nat. Libr., Exot. Moths, p. 138, pl. 13 (1841).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, upper Luangwa valley.

PSEUDAPHELIA APOLLINARIS Boisd. Delegorgue's Voy. Afr. Austr. ii. p. 601 (1847).

N.W. RHODESIA, Kansanshi.

GOODIA KUNZEI Dewitz, Verh. Leop.-Carol. Akad. xliii. p. 70, pl. iii. f. 14 (1881).

Congo, Katanga, Kambove; N.E. RHODESIA, E. Luangwa distr.

CARNEGIA PANCRATIA Weym. Iris, xvi. p. 232, pl. ii. f. 8 (1903) N.E. Rhodesia, E. Luangwa distr., Petauke distr.

HENUCHA DELEGORGUEI Boisd. Delegorgue's Voy. Afr. Austr. ii. p. 601 (1847).

Congo, S.E. Katanga.

SABALIAD.E.

SABALIA FULVICINCTA Hmpsn. Trans. Ent. Soc. 1901, p. 167. Congo, Katanga, Kambove.

URANIADÆ.

ACROPTERIS ALBIDIORATA Mab. Ann. Soc. Ent. Belg. xxxvii p. 62 (1893).

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, Kalungwisi distr.

ACROPTERIS ANGULATARIA Fabr. Ent. Syst. iii. 2, p. 164 (1794). Congo, Katanga, Kambove.

ACROPTERIS TENELLA Wlk. Pr. Nat. Hist. Soc. Glasg. i. p. 377 (1869).

N.E. RHODESIA, Luangwa valley.

ACROPTERIS ILLITURATA WART, Nov. Zool. iv. p. 198 (1897). N.E. Rhodesia, upper Luangwa valley.

ARBELIDÆ.

MARSHALLIANA BIVITTATA Auriv. Ent. Tidskr. 1901, p. 126. Congo, S.E. Katanga.

Cossidæ.

AZYGOPHLEPS INCLUSA Wlk. vii. 1534 (1856). Congo, S.E. Katanga.

AZYGOPHLEPS ATRIFASCIATA, sp. n. (Pl. XXXIX. fig. 20.)

Q. Head and thorax creamy white; palpi blackish except at base; frons rufous with lateral blackish bars; antennæ black; tegulæ with black patch at middle with two broad subdorsal PROC. ZOOL. SOC.—1910, No. XXXI.

fasciæ with some leaden-grey scales mixed extending from it to metathorax; pectus with sublateral blackish fasciæ; tibiæ above and the tarsi black with a bluish gloss; abdomen white with lateral fuscous bands and blackish lateral fascia on the elongate anal somite, the ventral surface suffused with yellow-brown. Fore wing creamy white reticulated with orange; a black fascia on costal area from near base, broadening to before apex where it narrows to a point, its lower edge rather irregular; a broad black fascia below the cell from near base, expanding beyond the cell to termen above vein 5 and leaving some pale marks on termen below vein 5, its upper edge irregular; slight black spots on termen at veins 7, 6; cilia tinged with fuscous except at base. Hind wing white with fuscous-brown streak in submedian fold from near base and fuscous suffusion between veins 5 and 2; vein 7 streaked with fuscous brown towards apex; the underside with fuscous suffusion on costal area, narrowing to base, and some fuscous suffusion on termen between veins 5 and 2.

Hab. N.E. RHODESIA, Kalungwisi distr. (*Neare*), $1 \Leftrightarrow type$. *Exp.* 80 mm.

CHALCIDICA STEPHANIA Druce, P. Z. S. 1887, p. 685, pl. 55. f. 3 (1888).

N.E. RHODESIA, E. Luangwa distr.

LASIOCAMPIDÆ.

PSEUDOMETA CYMOGRAPHA, sp. n. (Pl. XXXIX. fig. 18.)

 \mathcal{S} . Head and thorax grey, tinged with ochreous and slightly invorated with brown; abdomen grey tinged with brown; palpi, pectus, legs, and ventral surface of abdomen more strongly invorated with brown. Fore wing grey slightly invorated with brown; traces of a sinuous antemedial line formed of brown striæ from below costa to inner margin; postmedial line redbrown, sinuous from costa to vein 6, then waved and oblique to submedian fold and bent outwards to inner margin, some red-brown suffusion beyond it on inner area; the veins of terminal area with faint pale streaks; cilia dark brown at tips. Hind wing grey suffused with red-brown, the veins beyond the cell with faint pale streaks; a double minutely waved sinuous postmedial line; cilia dark brown at tips; the underside with red-brown suffusion on disk, a subterminal red-brown bar between veins 3 and 2.

Hab. N.E. RHODESIA, Feira (Neave), 1 & type. Exp. 50 mm.

GONOMETA GRISEOCINCTA, sp. n. (Pl. XL. fig. 15.)

 \mathcal{S} . Head, thorax, and abdomen purple-brown tinged with grey. Fore wing purple-brown suffused with grey; antemedial line purple-brown, double, sinuous; a small elliptical black discoidal spot; postmedial line purple-brown, double, diffused,

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slightly incurved below costa and oblique below vein 4; the terminal area browner, with a lunulate grey subterminal line and some grey on termen; cilia chocolate-red. Hind wing with the base purplish brown suffused with grey, the disk deep chocolate-red; a terminal grey band; cilia chocolate-red at tips.

Hab. N.E. RHODESIA, Serenji distr. (Neave), 1 3 type. Exp. 90 mm.

GONOMETA DRUCEI Beth.-Baker, A. M. N. H. (8) ii. p. 260 (1908). (Pl. XLI. fig. 16.)

N.E. RHODESIA, Chinsali distr.

CRASPIA WAHLBERGI Auriv. Ark. f. Zool. v. 5, p. 20 (1909).

N.E. RHODESIA, E. Luangwa distr.

METANASTRIA PALLENS Beth.-Baker, A. M. N. H. (8) ii. p. 260 (1908).

N.E. RHODESIA, E. Luangwa distr.

PHILOTHERMA FUSCESCENS, sp. n. (Pl. XLI. fig. 15.)

 σ . Head and thorax grey tinged with brown, the branches of antennæ rufous; abdomen grey tinged with reddish brown, a dark brown lateral line. Fore wing grey suffused with fuscous brown; an indistinct fuscous antemedial line, slightly incurved at subcostal nervure, then obliquely excurved; a small pale discoidal spot; postmedial line fuscous, excurved below costa, then oblique; an oblique subterminal series of dentate blackish marks, bent inwards to costa, somewhat incurved at vein 5 and angled outwards at vein 3. Hind wing grey suffused with fuscous brown; traces of a diffused sinuous medial fuscous band; a subterminal series of rather diffused fuscous dentate marks; cilia fuscous; the underside with the markings less distinct.

Hab. Congo, S.E. Katanga (Neave), 1 & type. Exp. 92 mm.

PHILOTHERMA SORDIDA Auriv. Trans. Ent. Soc. 1905, p. 318, pl. 16. f. 2.

N.W. RHODESIA, Alala plateau; N.E. RHODESIA, Kalungwisi distr.

LENODORA NIGROLINEATA Auriv. Ent. Tidskr. xvi. p. 115 (1890). N.E. Rhodesia, Fort Jameson.

BOMBYCOPSIS VENOSA Butl. P. Z. S. 1895, p. 269, pl. xvi. f. 6. N.E. Rhodesia, Chambezi valley.

CERATOPACHA GEMMATA Dist. A. M. N. H. (6) xx. p. 207 (1897). N.E. Rhodesia, Luangwa valley.

CHRYSOPOLOMIDÆ.

CHRYSOPOLOMA ROSEA Druce, P. Z. S. 1886, p. 410, pl. 38, f. 3. N.E. RHODESIA, E. Luangwa distr.

CHRYSOPOLOMA ALBIDISCALIS, sp. n. (Pl. XL. fig. 14.)

 \mathfrak{Q} . Head fulvous; antennæ black; thorax ochreous white, the patagia tinged with fulvous; the fore legs and tarsi fulvous; abdonen ochreous white with segmental fulvous rings, except on ventral surface. Fore wing ochreous white tinged with rufous, the veins of terminal half more fulvous; a round white discoidal spot; postmedial line dark brown, slightly bent inwards to costa, rather oblique to vein 6, then inwardly oblique and somewhat crenulate; cilia rufous. Hind wing ochreous white; a slightly waved excurved brown postmedial line from below costa to inner margin, the veins beyond it streaked with fulvous; cilia rufous; the underside with the postmedial line somewhat dentate, the terminal area tinged with rufous.

Hab. Congo, Katanga, Kambove (*Neave*), $1 \Leftrightarrow type$. *Exp.* 78 mm.

CHRYSOPOLOMA INSPERSA, sp. n. (Pl. XL. fig. 16.)

Q. Head and front part of thorax grey mixed with dark brown, the hinder part of thorax and antennæ fulvous mixed with some grey; abdomen fulvous, with some dark scales; pectus, legs, and ventral surface of abdomen grey mixed with dark brown. Fore wing fulvous irrorated with fuscous, the costa suffused with grey; a small white discoidal spot defined by black; an oblique blackish postmedial line slightly bent outwards to costa; cilia grey tinged with fuscous. Hind wing fulvous, sparsely irrorated with fuscous except on costal area; a small blackish discoidal lunule; postmedial line blackish, oblique, obsolescent towards costa and slightly bent outwards to inner margin; cilia grey mixed with fuscous; the underside greyer, thickly irrorated with fuscous and with a few hairy white scales, the discoidal lunule with slight white centre, the postmedial line reaching the costa but not the inner margin.

Hab. Conco, S.E. Katanga (Neare), 1 2 type. Exp. 46 mm.

LIMACODIDÆ.

SUSICA PYROCAUSTA, sp. n. (Pl. XXXIX. fig. 10.)

J. Head, thorax, and abdomen ochreous tinged with rufous and mixed with black. Fore wing purplish red, the costa ochreous irrorated with black; a diffused curved black antemedial band from middle of cell to inner margin; two conjoined black discoidal points; postmedial line grey-white, oblique, defined on outer side by black suffusion except towards costa and on inner side slightly by black from lower angle of cell to inner margin; cilia ochreous white mixed with black and with ochreous-white lines near base and tips. Hind wing ochreous white, the inner margin tinged with rufous, the cilia with fuscous mixed; the underside ochreous tinged with rufous, the terminal area slightly irrorated with fuscous.

Q. Hind wing dark reddish brown, with a pale line at base of cilia.

Hab. Congo, Katanga, Kambove (Neave), 1 & type; MASHONA-LAND (Dobbie), 1 &, 1 Q, Salisbury (Marshall), 1 &; TRANSVAAL (Pead), 1 Q. Exp. 28-34 mm.

THOSEA CATORI Beth.-Baker, A. M. N. H. (8) ii. p. 257 (1908).

Congo, S.E. Katanga, Kambove.

MIRESA SEMICALIDA, sp. n. (Pl. XXXIX. fig. 21.)

 σ . Head and thorax deep chestnut-red; abdomen rather paler, with slight fuscous segmental lines; the tibial spurs whitish. Fore wing deep chestnut-red to the silvery-white postmedial line, which is excurved at vein 6, incurved at discal fold, dentate below veins 4 and 3, then retracted to before middle, and again slightly excurved at vein 1, the area beyond it suffused with leaden fuscous bounded by a series of slight pale spots bent inwards to the postmedial line below costa; the terminal area dull rufous. Hind wing yellowish suffused with rufous; the cilia rufous with a silvery gloss at tips; the underside with the costal area deep rufous.

Hab. Congo, S.E. Katanga (Neave), 6 & type; N.E. Rhodesia, Lukashashi R. (Neave), 1 & . Exp. 30 mm.

MIRESA USTITERMINA, sp. n. (Pl. XXXIX, fig. 11.)

 \mathcal{J} . Head, thorax, and abdomen dark brown mixed with some red. Fore wing glossy fuscous brown, the base tinged with red, the terminal area deep fiery red, its inner edge curved; cilia glossy fuscous brown. Hind wing pale greyish brown, the cilia with a leaden gloss at tips; the underside rather darker greybrown slightly irrorated with fuscous.

Hab. Congo, S.E. Katanga (Neare), 2 & type. Exp. 26 mm.

PARASA VIVIDA Wlk. XXXII. 478 (1865).

N.E. RHODESIA, E. Luangwa distr.

MACROPLECTRA RUFOPALLENS, sp. n. (Pl. XXXIX, fig. 16.)

Head and tegulæ ochreous tinged with rufous; thorax and abdomen ochreous white; antennæ with the shaft whitish; pectus, legs, and ventral surface of abdomen tinged with rufous. Fore wing silky ochreous white tinged with rufous except on inner area; a faint brownish subterminal line ending at tornus. Hind wing uniform silky ochreous white. Underside of fore wing suffused with brown except on inner area.

Hab. UGANDA. White Nile, Gondokoro (*Reynes-Cole*), 7 \triangleleft , 1 \Diamond ;

BR. E. AFRICA, Machakos (*Crawshay*), $4 \ 3 \ \text{type}$; N.E. RHODESIA, upper Luangwa valley (*Neave*), $1 \ 3 \ 3 \ \text{Gazaland}$, Mt. Chirinda (*Marshall*), $1 \ 3 \ \text{.} \ Exp.$, $3 \ 16-20$, $9 \ 18 \ \text{mm}$.

GAVARA VELUTINA Wlk. xii. 771 (1857).

N.E. RHODESIA, Fort Jameson.

ZINARA DISCOPHORA, sp. n. (Pl. XXXIX, fig. 22.)

J. Head, thorax, and abdomen ochreous tinged with rufous and mixed with blackish. Fore wing ochreous suffused with brown and irrorated with blackish; a black line from subcostal nervure near base curved round to just above inner margin, then upwards to subcostal nervure before middle, enclosing a round pale patch; the inner medial area rufous, with an oblique sinuous whitish line from lower angle of cell to inner margin, some slight black marks above it on discocellulars, and a black point beyond it in submedian fold; postmedial line indistinct, pale, slightly excurved below costa, then incurved, a rufous patch beyond it on costal area with three slight dentate black marks on it; the apical area pale, with a black-brown terminal band from apex to vein 5, angled inwards and forming a triangular patch at vein 6. Hind wing ochreous whitish suffused with reddish brown; a faint oblique brown line from below middle of costa to termen at submedian fold; a slight brownish terminal line; the underside grey tinged with brown and slightly irrorated with fuscous.

11 ab. N.E. RHODESIA, Chinsali distr. (Neave), 1 & type. Exp. 20 mm.

ALTHA LACIDES Druce, A. M. N. H. (7) iii. p. 474 (1899). (Pl. XXXIX, fig. 17.)

Congo, S.E. Katanga.

ALTHA TEGULA Dist. A. M. N. II. (6) xx. p. 209 (1897). (Pl. X I.I. fig. 29.)

N.E. RHODESIA, Bangweolo distr.

ALTHA CHIONOSTOLA, sp. n. (Pl. XXXIX. fig. 28.)

Head, thorax, and abdomen silvery white, the branches of antennæ and disk of tegulæ tinged with yellow; palpi with the second joint fuscous above; tarsi tinged with fuscous; abdomen with blackish lateral bars. Fore wing silvery white; a broad olive-fuscous fascia with some silvery scales on it running inwards from termen just below apex to below middle of costa, then as an erect band to inner margin, an oblique black striga on its outer edge at lower angle of cell, slight black streaks on extremity of the veins at apex, and a black line on apical part of termen; cilia blackish at tips at apex. Hind wing silvery white.

Hab. Congo, S.E. Katanga (Neave), $1 \ \mathcal{Q}$ type; TRANSVAAL, Barberton (Cooke), $1 \ \mathcal{J}$. Exp. 36 mm.

ZYGÆNIDÆ,

HIMANTOPTERIN.E.

SEMIOPTILA TORTA, Butl. A. M. N. H. (5) XX. p. 181 (1887). Congo, Katanga, Kambove.

SEMIOPTILA FLAVIDISCATA, sp. n. (Pl. XXXIX. fig. 27.)

 \mathcal{J} . Head and thorax black-brown, the tegulæ and fringe of hair on upper edge of patagia fulvous orange; abdomen dorsally red-brown, yellow at sides and black-brown below. Fore wing dark brown, thinly scaled, the veins darker; the cell fulvous yellow, conjoined to a round spot beyond it; the inner area fulvous yellow to the cell and vein 2. Hind wing linear-lanceolate, expanding somewhat towards base but not towards extremity; the basal third fulvous yellow, the terminal two-thirds black-brown.

Q. Fore wing with the cell and inner area paler fulvous yellow; hind wing expanding still less towards base, the basal third pale fulvous yellow.

Hab. N.E. RHODESIA, Serenji distr. (Neave), 1 &, 1 & type. Exp. 24 mm.

STAPHYLINOCUROUS WHYTEI Butl. P.Z.S. 1893, p. 376, pl. 60. f. 11.

Congo, Katanga, Kambove.

STAPHYLINOCHROUS FULVA, sp. n. (Pl. XL. fig. 10.)

 \mathcal{S} . Head and thorax black, with some fulvous hair on tegulæ and patagia; legs with some yellowish hair; abdomen fulvous mixed with brown. Fore wing fulvous red, the median nervure, veins rising from it and vein 1 somewhat blackish; the terminal area black-brown, expanding towards apex and with its inner edge evenly curved. Hind wing fulvous red; the terminal area black-brown, expanding somewhat towards apex, its inner edge curved and produced to slight streaks on the veins.

Hab. Coxco, Katanga, Kambove (Neave), 3 & type. Exp. 42 mm.

STAPHYLINOCHROUS EURYPERALIS, sp. n. (Pl. XL. fig. 17.)

Head and front of thorax fulvous, the rest of thorax and antennæ black; pectus and legs fulvous mixed with brown; abdomen fulvous, dorsally tinged with brown. Fore wing fulvous yellow, the veins streaked with dark brown; the terminal area fuscous brown, expanding into a rounded patch extending to the cell on apical area and narrowing to a point at tornus. Hind wing fulvous yellow, the veins beyond the cell brownish; the terminal area fuscous brown, moderately broad at apex, narrowing to a point at tornus.

Hab. Br. C. AFRICA, Matope (de Jersey), 1 & ; N.E. RHODESIA Luangwa valley (Neare), 2 & type. Exp. 34-36 nm.

Genus THERMOCHROUS, nov.

Type, T. fumicincta.

Proboscis and palpi absent; frons smooth; eyes rather small, round; antennæ of male moniliform, setose; head, thorax, and abdomen clothed with rough hair; tibiæ without spurs. Fore wing rather narrow, the apex rounded, the termen obliquely curved; the cell very long; vein 3 from long before angle; 5 from just below angle of discocellulars, 6 from just above angle; 7, 8 from angle or stalked; 9, 10 absent; 11 free. Hind wing with the cell long; vein 3 from long before angle, 5 from well above angle; 6 from just above angle of discocellulars; 8 from just before end of cell.

THERMOCHROUS FUMICINCTA, sp. n. (Pl. XL. fig. 11.)

Fore wing with veins 7, 8 from cell.

Head, thorax, and abdomen fulvous; antennæ black-brown; legs tinged with brown in front. Fore wing fulvous red, the costal edge and veins of terminal half dark brown; the terminal area bluish fuscous, narrowing to a point at tornus and expanding on apical area to the cell and along costa to middle. Hind wing fulvous red, the terminal area bluish fuscous, moderately broad at costa and ending in a point at vein 1, its inner edge produced to slight streaks on the veins.

Hab. Coxgo, Katanga, Kambove (*Neare*), 25 $_{\circ}$, 3 $_{\circ}$ type. *Exp.* 30-40 mm.

THERMOCHROUS STENOCRASPIS, sp. n. (Pl. XL. fig. 18.)

Fore wing with veins 7, 8 from cell.

 \mathcal{J} . Head, thorax, and abdomen fulvous with some blackish hair; antennæ and legs brownish. Fore wing fulvous yellow, the costa and veins streaked with black, vein lc towards extremity only; the costal area blackish on terminal half, the veins of terminal area more strongly streaked with black on apical half; cilia blackish except towards tornus. Hind wing fulvous yellow, the veins of terminal area streaked with black, the termen narrowly and cilia blackish.

Hab. N.E. RHODESIA, E. Luangwa distr., Petauke (Neave), 7 5 type. Exp. 22-26 mm.

ZYGÆNINÆ.

NEUROSYMPLOCA PROCRIOIDES Butl. P.Z. S. 1893, p. 676. N.E. Rhodesia, upper Luangwa valley.

MALAMBLIA FLAVIPALPIS, sp. n. (Pl. XL. fig. 12.)

 \mathcal{Q} . Head, thorax, and abdomen fuscous brown; palpi pale yellow, the third joint black; mid and hind legs with the extremities of femora and base of tibiæ yellow; abdomen yellow at

1910.]

extremity below. Wings uniform fuscous brown tinged with metallic blue.

Hab. N.E. RHODESIA, Tanganyika plateau (Neave), $1 \ \bigcirc$ type. Exp. 18 mm.

SALIUNCA GLENNIA Jord. Entom. xl. p. 123 (1897).

N.E. RHODESIA, E. Luangwa distr.

Pompostolinæ.

POMPOSTOLA HEMICHRYSA, sp. n. (Pl. XL. fig. 13.)

Q. Head and thorax bluish black; the tegulæ, patagia, and mid tibiæ except at extremity golden yellow; abdomen blueblack, the sides golden yellow to middle. Fore wing golden yellow to beyond middle with a short black streak in base of cell, the outer edge of the yellow area angled outwards just beyond lower angle of cell; the terminal area blue-black. Hind wing golden yellow, the terminal area black-brown, broad at costa and narrowing to a point at vein 1.

Hab. N.E. RHODESIA, E. Luangwa distr. (Neare), $3 \circlearrowright$ type. Exp. 36 mm.

POMPOSTOLA SCINTILLANS Butl. P. Z. S. 1893, p. 675, pl. ix. ff. 12-13.

N.E. RHODESIA, Serenji distr.

[This species frequents open grassy spots and invariably rests with partially expanded wings on the heads of grasses or similarly exposed positions. Its shining blue-black colour, steady flight, and long hind legs trailing behind it combine to make it astonishingly like a Hymenopteron when on the wing.

I also noted it in some numbers in Southern Angoniland, S.W. of L. Nyasa, in similar country, December 1908.—S. A. N.]

BYBLISIA CAUDATA Jord. Entom. xl. p. 127 (1907).

N.E. RHODESIA, Luangwa valley.

ARNIOCERA CHALCOPASTA, sp. n. (Pl. XL. fig. 19.)

 σ . Head, thorax, and abdomen black suffused with brilliant metallic blue; palpi and fore coxæ deep crimson. Fore wing black suffused with brilliant metallic blue; antemedial, medial, and postmedial erect metallic golden bands, the terminal area suffused with metallic gold. Hind wing dark brown; the inner area tinged with metallic blue not extending to tornus; the underside suffused with metallic blue except towards apex.

Hab. N.E. RHODESIA, Tanganyika plateau (Neave), 1 S type. Exp. 32 mm.

THYRIDIDÆ.

RHODONEURA FUSCIBASIS, sp. n. (Pl. XL. fig. 20.)

d. Head and thorax dark olive-brown mixed with some

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silvery white; mid and hind legs mostly white; abdomen white with obscure olive dorsal bands. Fore wing with the basal area dark olive-brown with obliquely curved outer edge; the rest of wing white; the costa tinged with fuscous and irrorated with silver; a white striga defined by fuscous across upper extremity of cell; a diffused leaden fuscous band from the costal area beyond the cell to just above inner margin, its inner edge incurved below the cell and with double series of dark striæ on it representing the medial and postmedial lines, some white between them in submedian interspace and on the postmedial line beyond the cell; an olive-brown patch before termen at discal fold, with traces of a line from it to inner margin and some fuscous beyond it; two black points just before termen below apex. Hind wing silvery white, the extreme base olive-brown; traces of medial and postmedial grey bands defined on each side by dark striæ from below costa to inner margin; a faint olive subterminal line from below costa to vein 4 and two black points just before termen below apex.

 \mathcal{Q} . Fore wing with the dark medial and subterminal markings more developed.

Hab. Conco, Katanga, Kambove (Neave), 3 ♂, 2 ♀ type. Exp. 28-36 mm.

RHODONEURA DISCATA WAIT. Nov. Zool. xii. p. 380 (1905). (Pl. XLI. fig. 25.)

N.E. RHODESIA, Chambezi valley.

PYRALIDÆ.

CRAMBINÆ.

CRAMBUS FUSCIVITTALIS, sp. n. (Pl. XL. fig. 1.)

Q. Head and thorax brownish ochreous, the shoulders and tegulæ dark brown; antennæ black; palpi at tips and fore legs in front dark brown; abdomen white tinged with brown. Fore wing brownish ochreous with a brown fascia along median nervure expanding triangularly beyond the cell to termen at apex and submedian fold; a terminal series of slight blackish striæ; cilia with fine whitish lines at base and middle. Hind wing silky white with a very faint brownish tinge.

Hab. N.E. RHODESIA, Serenji distr. (Neare), $1 \ \bigcirc \ type$. Exp. 26 mm.

CRAMBUS SECTITERMINA, sp. n. (Pl. XL. fig. 2.)

Fore wing with vein 11 becoming coincident with 12.

Q. Head, thorax, and abdomen white tinged with brown; palpi brown at base. Fore wing white slightly tinged with rufous on basal, costal, and inner areas, the terminal area irrorated with brown at apex and below vein 4; a blackish streak in base of submedian fold; a minute postmedial black point in discal fold 1910.]

with traces of an oblique line from it to inner margin; a faint fulvous subterminal line; the interspaces with minute black streaks in their extremities; cilia with a slight blackish line near base. Hind wing white faintly tinged with ochreous brown; a fine brown terminal line; cilia white.

Hab. N.E. RHODESIA, E. Luangwa distr., Mbala country (Neave), $1 \$ type. Exp. 28 mm.

PLATYTES ARGYRODONTA, sp. n. (Pl. XL. fig. 3.)

Head and thorax rufous mixed with silvery white; abdomen white slightly tinged with rufous at base. Fore wing rufous; a silvery-white fascia below costa through the cell, beyond which it is trifurcate, the teeth defined by blackish, the uppermost tooth extending to nearest termen; a silvery-white fascia below submedian fold extending to near termen towards which it bifurcates, an obliquely curved silvery-white streak from vein 3 just before termen running inwards between its teeth; an oblique silverywhite streak across apical area; two yellowish-white marks extending between the lower teeth of the trifurcate fascia; a fine black terminal line defined on inner side by a white line; cilia white with some dark brown at tips. Hind wing white faintly tinged with brown.

Hab. N.W. RHODESIA, Alala plateau, Mkushi distr. (Neave), 1 & 1 & type. Exp. 26 mm.

CHILO SUPPRESALIS Wlk. xxvii. 166 (1863). Portuguese E. Africa, Chinde.

CHILO FUSCICILIA, sp. n. (Pl. XL. fig. 4.)

Q. Head and thorax ochreous tinged with rufous; abdomen ochreous white dorsally tinged with rufous at base. Fore wing ochreous suffused with rufous, the veins with slight whitish streaks, the interspaces of terminal area with faint dark streaks; a black discoidal point; a terminal series of black points; cilia fuscous except at base. Hind wing white faintly tinged with rufous; the underside with the costal area more strongly tinged with rufous.

Hab. N.E. RHODESIA, Bangweolo distr. (Neave), 1 Q type. Exp. 34 mm.

TALIS NIGRORADIANS Mab. Ann. Soc. Ent. Fr. xlviii. p. 749 (1900).

Congo, S.E. Katanga, Kambove.

CHARLTONA CHRYSOPASTA, sp. n. (Pl. XL. fig. 5.)

 \mathcal{Q} . Head and thorax white mixed with metallic golden scales and irrorated with black; palpi blackish; tarsi black ringed with white; abdomen white mixed with brown. Fore wing white thickly irrorated with metallic golden and black scales; an illdefined white fascia below base of cell; medial line double, black

filled in with white, slightly excurved at middle; a white discoidal lunule defined by black; a diffused white fascia from it to termen; a terminal series of small rather elongate black spots, the uppermost with a black streak from it to upper extremity of discoidal lunule; cilia blackish. Hind wing whitish suffused with brown, the cilia silvery white.

Hab. N.E. RHODESIA, upper Luangwa valley (Neave), 1 ♀ type. Exp. 22 mm.

CHARLTONA PLURIVITTALIS, sp. n. (Pl. XL. fig. 6.)

 \bigcirc . Head and thorax pale ochreous suffused with brown and strongly irrorated with black; abdomen ochreous white. Fore wing ochreous, the interspaces filled by black fasciæ formed by very thick irroration. Hind wing white tinged with fuscous except towards base, the cilia white.

Hab. Congo, S.E. Katanga (*Neave*), $1 \ \mathcal{Q}$; MASHONALAND, Salisbury (*Marshall*), $9 \ \mathcal{Q}$ type. *Exp.* 44–50 mm.

ANCYLOLOMIA CHRYSOGRAPHELLA Koll. Hüg. Kasch. iv. p. 494 (1844).

Congo, S.E. Katanga.

ANCYLOLOMIA PECTINIFERA, sp. n. (Pl. XL. fig. 7.)

Antennæ of male with long uniseriate branches.

 \mathcal{S} . Head and thorax rufous mixed with some whitish; antenne with the shaft dark brown; legs suffused with brown; abdomen white suffused with brown except at extremity. Fore wing whitish suffused with golden bronze in, below, and just beyond the cell with minute scattered black streaks on this area; the costal edge dark brown; the veins slightly streaked with brown, the median nervure defined by slight white streaks; the interspaces of terminal area with brown streaks with white streaks between them, before the subterminal line, which is blackish with a fine brown line before it and fuscous line beyond it, bent outwards to apex, then minutely waved, angled outwards at vein 4 where the fuscous line is interrupted; a black terminal line; cilia silvery white with black line near tips. Hind wing white suffused with fuscous brown, the cilia silvery white; some white in base of cell, on inner margin, and termen.

Q. Fore wing with ill-defined black-irrorated bronze streaks in cell and submedian fold from near base to termen, the veins and interspaces without dark streaks, the subterminal line obsolete except towards apex; a terminal series of black points.

Hab. N.W. RHODESIA, Alala plateau (Neave), $1 \, \varphi$; N.E. RHODESIA, Chinsali distr. (Neave), $1 \, \beta$ type; MASHONALAND, Salisbury (Marshall), $2 \, \beta$; NATAL, Estcourt (Hutchinson), $2 \, \beta$. Exp. β 28-36, φ 42 mm.

ANCYLOLOMIA ENDOPHÆALIS, Sp. n. (Pl. XL. fig. 8.)

Q. Head and thorax fuscous brown mixed with greyish;

abdomen whitish tinged with brown and with fulvous at base. Fore wing ochreous with a fulvous tinge, the inner area suffused with fuscous brown; a dark streak irrorated with black from just before lower angle of cell, where it is interrupted, to some fuscous-brown suffusion on termen extending from apex to vein 4; some black irroration above middle of vein 1 and in submedian fold below end of cell; a terminal series of black points; cilia silvery at tips from apex to vein 4. Hind wing white suffused with brown except on inner area; cilia white.

Hab. Congo, S.E. Katanga (Neave), $1 \Leftrightarrow type$. Exp. 34 mm.

SCHŒNOBIANÆ.

SCIRPOPHAGA GILVIBERBIS Zell. Mon. Chil. & Cramb. p. 2 (1863).

Congo, S.E. Katanga; N.E. RHODESIA, upper Luangwa valley, Chinsali distr.

BRIHASPA CHRYSOSTOMA Zell, Lep. Micr. Caffr. p. 68 (1852).

N.E. RHODESIA, E. Luangwa distr.

ANERASTIAN.E.

PECTINIGERIA DEVYLDERI Rag. Nouv. Gen. p. 43 (1888); Rom. Mém. viii. p. 354, pl. xxxvii. f. 10.

N.W. RHODESIA, Alala plateau.

PECTINIGERIA NIGRITELLA Rag. Rom. Mém. viii. p. 354, pl. xxxvii. f. 13 (1901).

N.W. RHODESIA, Alala plateau.

POLYOCHA (LODIANA) SANGUIFUSALIS, Sp. n. (Pl. XL. fig. 9.)

Antennæ of male minutely serrate, the shaft excised at base, then thickened with a ridge of black scales above; palpi porrect, hollowed out to contain the brush-like maxillary palpi.

Head and thorax rufous with a yellowish streak on vertex and tegulæ; palpi and fore legs suffused with dark brown; abdomen ochreous tinged with reddish brown. Fore wing yellow, the costa whitish with a dark brown streak below it; diffused bloodred fasciæ below base of cell and on inner margin which has some brown on it beyond middle; an oblique blood-red patch at middle of submedian interspace with some silvery scales on it; a red streak below terminal half of the brown subcostal fascia emitting a tooth at discocellulars; a postmedial red bar with some silvery scales on it from vein 4 to the red inner area; termen and cilia red. Hind wing grey-white, the veins, costal, and terminal areas suffused with brown; cilia whitish with a brown line near base.

Hab. N.E. RHODESIA, Chinsali distr. (Neave), 3σ , $1 \circ p$ type. Exp. 28 mm.

PHYCITINÆ.

POGONONEURA XANTHOLEPIS, Sp. n. (Pl. XL. fig. 21.)

Antennæ of male with the tuft of scales in sinus very large; fore wing with the costal edge fringed with yellow scales on basal half.

 \mathcal{S} . Head, thorax, and abdomen fuscous mixed with grey; tarsi with slight pale rings. Fore wing grey suffused with fuscous; an antemedial patch of slight dark suffusion on inner margin; faint dark points at angles of cell; postmedial line very indistinct and rather diffused, angled outwards at vein 6, then oblique; traces of a diffused dark subterminal line, angled inwards at vein 6; a terminal series of slight black points and a fine blackish line near base of cilia. Hind wing semihyaline white, the termen tinged with fuscous; a fine black line near base of cilia.

Hab. N.E. RHODESIA, upper Luangwa valley (Neave), 1δ type. Exp. 22 mm.

MUSSIDIA ALBIPARTALIS, sp. n. (Pl. XL. fig. 26.)

 \circ . Head, thorax, and abdomen grey tinged with ochreous brown and irrorated with fuscous; palpi whitish except towards tips; abdomen with dorsal and subdorsal blackish marks on second segment. Fore wing grey suffused with brown and irrorated with fuscous, the medial area to submedian fold and the terminal half of costal area whiter; a blackish streak below antemedial part of costa and a blackish streak in submedian fold from base to the antemedial line, which is blackish, rather diffused, and somewhat dentate; a V-shaped blackish mark in end of cell and a dark shade from discocellulars to inner margin; postmedial line very indistinct, dentate to vein 3, then bent inwards and again outwards to inner margin; traces of a subterminal line with slight dark streaks on the veins, bent inwards at vein 2; a terminal series of blackish points. Hind wing semihyaline whitish, the costal area suffused with fuscous, a fuscous terminal line.

Hab. Coxgo, Katanga, Kambove (*Neare*), $1 \Leftrightarrow type$. *Exp.* 46 mm.

EPIPASCHIAN.Æ.

MACALLA MELANOBASIS Hmpsn. A. M. N. H. (7) xvii. p. 139 (1906). (Pl. XLI. fig. 21.)

N.E. RHODESIA, upper Luangwa valley.

CHRYSAUGINÆ.

MACNA HAMPSONI Dist. A. M. N. H. (6) xx. p. 17 (1897). (Pl. XLI. fig. 9.)

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

PYRALINÆ.

BOSTRA THERMIALIS, sp. n. (Pl. XL. fig. 29.)

Antennæ of male bipectinate with short branches, the apex ciliated.

Head and thorax purplish red-brown mixed with grey; tarsi with whitish rings; abdomen fulvous, suffused with brown at base, the ventral surface chocolate-brown. Fore wing purplish red-brown irrorated with grey and with faint dark streaks in submedian fold and the interspaces of terminal half; traces of a pale oblique sinuous antemedial line; some whitish scales forming a slight spot in middle of cell and a discoidal bar; postmedial line formed of whitish points with traces of a curved minutely waved dark line on their outer side; a terminal series of white points; cilia fuscous brown mixed with whitish. Hind wing with the basal half whitish, the terminal half purplish red; a curved dark postmedial line defined on outer side by whitish, obsolescent towards inner margin; cilia whitish with dark lines near base and tips; the underside with the costal and terminal areas suffused with purplish red and irrorated with fuscous.

Hab. N.E. RHODESIA, Serenji distr. (Neave), 1 ♂, 1 ♀ type. *Exp.* 40 mm.

BOSTRA PERRUBIDA, sp. n. (Pl. XL. fig. 28.)

Antennæ of male with fasciculate cilia.

d. Head and thorax deep purplish red mixed with some ochreous white; tarsi ochreous white irrorated with red; abdomen ochreous white irrorated with dark brown. Fore wing deep purplish red irrorated with black and some ochreous white; some ochreous white at base of inner margin; antemedial line ochreous white defined on outer side by blackish, bent inwards to costa, then erect, waved; the medial part of costa with ochreouswhite points; postmedial line ochreous white defined on inner side by blackish, dentate, slightly angled inwards at discal fold and incurved below vein 2; a slight blackish terminal line; cilia ochreous white with blackish line near base, the tips tinged with Hind wing ochreous irrorated with fuscous, the terminal red. area suffused with fuscous and some reddish at middle; postmedial line ochreous defined on inner side by fuscous, minutely dentate, obsolete towards costa; a blackish terminal line; cilia ochreous white with blackish line at middle, the tips tinged with red; the underside with the costal and terminal areas suffused with purplish red.

Hab. N.E. RHODESIA, Serenji distr. (Neave), 3 & type, Petauke distr. (Neave), 1 & . Exp. 30 mm.

Bostra TENEBRALIS Hmpsn. A. M. N. H. (7) xvii. p 348 (1906). (Pl. XLI. fig. 28.)

Coxco, Katanga, Kambove.

BOSTRA FUSCIPENNIS, sp. n. (Pl. XL. fig. 27.)

Q. Head and thorax fuscous brown with a greyish tinge; fore tibiæ and the tarsi paler; abdomen grey suffused with fuscous brown. Fore wing glossy fuscous brown tinged with grey; antemedial line whitish, slightly sinuous; some minute whitish points on medial part of costa; postmedial line whitish, incurved and slightly waved from costa to vein 5, then minutely dentate and slightly incurved at submedian fold; cilia whitish with dark line near base and dark tips. Hind wing grey suffused with fuscous brown, the terminal area rather darker, a slight whitish postmedial line, excurved below vein 5; cilia whitish with brown lines near base and tips; the underside rather darker with the postmedial line more distinct and minutely dentate.

Hab. N.E. RHODESIA, Petauke distr. (Neave), $1 \$ type. Exp. 24 mm.

Constantia aglossalis Hmpsn. A. M. N. H. (7) xvii. p. 354 (1906). (Pl. XLI, fig. 27.)

Portuguese E. Africa, Chinde.

HYDROCAMPINÆ.

Argyractis periopis, sp. n. (Pl. XL. fig. 22.)

d. Head, thorax, and abdomen white tinged with orangevellow. Fore wing orange, the basal area and costal area to beyond middle white, the latter tinged with brown; traces of a brown antemedial line, interrupted at middle and defined on outer side by diffused silvery white; a double curved brown medial line filled in with silvery white and interrupted below costa; an oblique wedge-shaped white postmedial patch defined by brown from costa to vein 4; a silvery-white subterminal band defined by brown from just below costa to vein 4 and a small wedge-shaped spot above tornus; a terminal series of black points; cilia silvery white tinged with brown. Hind wing orange, the basal area white with diffused curved brown subbasal and medial lines with silvery scales on them; a white patch on terminal area from below costa to submedian fold, its basal part irrorated with black and suffused with silver below, followed by two sinuous black lines and four ocellate black spots on termen with slight silver centres and curved black striæ on their inner sides; cilia silvery white tinged with brown, their bases blackish beyond the ocellate spots; the underside brownish white with the ocellate spots as above.

Hab. N.E. RHODESIA, Kalungwisi valley (Neave), 1 & type. Exp. 14 mm.

ZEBRONIA PHENICE Cram. Pap. Exot. iv. p. 185, pl. 382. f. G (1783).

Congo, Katanga, Kambove; N.E. RHODESIA, E. Luangwa

distr., Luangwa valley, Chambezi valley ; Portuguese E. Africa, Nyanji.

PYRAUSTINÆ.

ENTEPHRIA CRIBRATA Fabr. Ent. Syst. iii. 2, p. 215 (1794). N.E. Rhodesia, E. Luangwa distr.

ENTEPHRIA DIAPHANA Cram. Pap. Exot. ii. p. 26, pl. 113. f. G (1779).

N.E. RHODESIA, upper Luangwa valley, Chambezi valley.

ZINCKENIA FASCIALIS Cram. Pap. Exot. iv. p. 236, pl. 398. f. G (1783).

Congo, Katanga, Kambove; N.E. RHODESIA, upper Luangwa valley, Chinsali distr., Bangweolo distr.

ZINCKENIA PERSPECTALIS Hübn. Schmett. Eur., Pyr. f. 101 (1796).

N.E. RHODESIA, upper Luangwa valley.

MARASMIA TRAPEZALIS Guen. Delt. & Pyr. p. 200 (1854). N.E. Rhodesia, upper Luangwa valley.

SYNGAMIA ABRUPTALIS Wlk. xvii. 371 (1859).

N.E. RHODESIA, E. Luangwa distr.

BOCCHORIS INSPERSALIS Zell. Lep. Micr. Caffr. p. 33 (1852). N.E. RHODESIA, Fort Jameson.

NOSOPHORA LATIFERALIS Wlk. XXXIV. 1401 (1865).

N.E. RHODESIA, N. Luangwa, Chambezi valley, Lake Bang-weolo distr.

CHALCIDOPTERA RUFILINEALIS, sp. n. (Pl. XL. fig. 23.)

Palpi of male with the third joint clothed with turned-down hair; antennæ with the shaft excised at base.

Head and thorax pale yellow mixed with some rufous; palpi rufous; shoulders with dark brown streaks; patagia rufous on outer edge; abdomen pale yellow dorsally banded with rufous. Fore wing pale yellow, the costa rufous, the veins streaked with pale rufous; a subbasal rufous line from costa to vein 1; antemedial line rufous, oblique from costa to median nervure, then erect; a rufous point in middle of cell and quadrate discoidal spot; postmedial line rufous, minutely waved, oblique from costa to vein 7, excurved to vein 5, then oblique to inner margin at antemedial line and angled inwards at vein 2; terminal area rufous, expanding below vein 4. Hind wing yellowish white, a

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minutely dentate postmedial rufous line from costa to vein 3; terminal area rufous from apex to vein 2.

Hab. N.E. RHODESIA, Luangwa valley (Neave), 2 3, 1 9 type; NATAL, Durban (Leigh), 1 9. Exp. 24 mm.

CHALCIDOPTERA APPENSALIS Snell. Tijd. v. Ent. xxvii. p. 41, pl. 3. f. 12 (1884).

N.E. RHODESIA, upper Luangwa valley.

FILODES COSTIVITRALIS Guen. Maillard's Réunion, Lép. p. 65 (1862).

Congo, Katanga, Kambove; N.E. Rhodesia, E. Luangwa distr., Luangwa valley, Chambezi valley, Bangweolo distr.; Portuguese E. Africa, S. Angoniland.

PHRYGANODES PIASUSALIS Wlk. xviii. 1725 (1859).

N.E. RHODESIA, E. Luangwa distr., Mpika.

NACOLEIA INDICATA Fabr. Syst. Ent. p. 640 (1775).

PORTUGUESE E. AFRICA, S. Angoniland.

GONIORHYNCHUS GRATALIS Led. Wien. ent. Mon. iv. p. 473, pl. 11. f. 18 (1863).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

SYLEPTA OVIALIS Wlk. xviii. 636 (1859).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

SYLEPTA TORSIPEX Hmpsn. P.Z.S. 1898, p. 715, pl. 49. f. 12. N.E. Rhodesia, Chambezi valley.

STLEPTA BUTLERI Dewitz, Verh. Leop.-Carol. Akad. xliii. p. 87, pl. ii. f. 13 (1881).

N.E. RHODESIA, Kalungwisi distr.

SYLEPTA BALTEATA Fabr. Suppl. Ent. Syst. p. 457 (1798). N.E. Rhodesia, E. Luangwa distr., Luangwa valley.

SYLEPTA SABINUSALIS Wlk. xviii. 1708 (1859).

N.E. RHODESIA, E. Luangwa distr., Luangwa valley.

SYLEPTA DEROGATA Fabr. Syst. Ent. p. 641 (1775).

N.E. RHODESIA, upper Luangwa valley.

SYLEPTA MEGASTIGMALIS Hmpsn. P.Z.S. 1898, p. 723. (Pl. XLI, fig. 26.)

N.E. RHODESIA, E. Luangwa distr.